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<110> Eaton, Dan L.
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Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Watanabe, Colin K.
Wood, William I.

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 <213> Homo Sapien

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 Cys Arg Leu Leu Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu
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 Thr Ala Leu Lys Ala Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val
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 Gly Asp Gly Phe Val Val Ile Ser Arg Ile Ser Pro Asn Pro Lys
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 Cys Gly Lys Asn Gly Val Gly Val Leu Ile Trp Lys Val Pro Val
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 Ser Arg Gln Phe Ala Ala Tyr Cys Tyr Asn Ser Ser Asp Thr Trp
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Phe	Asn	Thr	Gln	Thr	Ala	Thr	Gln	Thr	Thr	Glu	Phe	Ile	Val	Ser	
				155					160					165	
Asp	Ser	Thr	Tyr	Ser	Val	Ala	Ser	Pro	Tyr	Ser	Thr	Ile	Pro	Ala	
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Pro	Thr	Thr	Thr	Pro	Pro	Ala	Pro	Ala	Ser	Thr	Ser	Ile	Pro	Arg	
				185					190					195	
Arg	Lys	Lys	Leu	Ile	Cys	Val	Thr	Glu	Val	Phe	Met	Glu	Thr	Ser	
				200					205					210	
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Phe	Lys	Asn	Glu	Ala	Ala	Gly	Phe	Gly	Gly	Val	Pro	Thr	Ala	Leu	
				230					235					240	
Leu	Val	Leu	Ala	Leu	Leu	Phe	Phe	Gly	Ala	Ala	Ala	Gly	Leu	Gly	
				245					250					255	
Phe	Cys	Tyr	Val	Lys	Arg	Tyr	Val	Lys	Ala	Phe	Pro	Phe	Thr	Asn	
				260					265					270	
Lys	Asn	Gln	Gln	Lys	Glu	Met	Ile	Glu	Thr	Lys	Val	Val	Lys	Glu	
				275					280					285	
Glu	Lys	Ala	Asn	Asp	Ser	Asn	Pro	Asn	Glu	Glu	Ser	Lys	Lys	Thr	
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Asp	Lys	Asn	Pro	Glu	Glu	Ser	Lys	Ser	Pro	Ser	Lys	Thr	Thr	Val	
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<211> 2586

<212> DNA

<213> Homo Sapien

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<212> PRT
<213> Homo Sapien

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35 40 45
Thr Leu Asn Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp
50 55 60
Thr Gln His Lys Leu Arg Ser Ala Val Glu Glu Met Glu Ala Glu
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Glu Ala Ala Ala Lys Ala Ser Ser Glu Val Asn Leu Ala Asn Leu

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Pro	Pro	Ser	Tyr	His	Asn	Glu	Thr	Asn	Thr	Asp	Thr	Lys	Val	Gly
				95					100					105
Asn	Asn	Thr	Ile	His	Val	His	Arg	Glu	Ile	His	Lys	Ile	Thr	Asn
				110					115					120
Asn	Gln	Thr	Gly	Gln	Met	Val	Phe	Ser	Glu	Thr	Val	Ile	Thr	Ser
				125					130					135
Val	Gly	Asp	Glu	Glu	Gly	Arg	Arg	Ser	His	Glu	Cys	Ile	Ile	Asp
				140					145					150
Glu	Asp	Cys	Gly	Pro	Ser	Met	Tyr	Cys	Gln	Phe	Ala	Ser	Phe	Gln
				155					160					165
Tyr	Thr	Cys	Gln	Pro	Cys	Arg	Gly	Gln	Arg	Met	Leu	Cys	Thr	Arg
				170					175					180
Asp	Ser	Glu	Cys	Cys	Gly	Asp	Gln	Leu	Cys	Val	Trp	Gly	His	Cys
				185					190					195
Thr	Lys	Met	Ala	Thr	Arg	Gly	Ser	Asn	Gly	Thr	Ile	Cys	Asp	Asn
				200					205					210
Gln	Arg	Asp	Cys	Gln	Pro	Gly	Leu	Cys	Cys	Ala	Phe	Gln	Arg	Gly
				215					220					225
Leu	Leu	Phe	Pro	Val	Cys	Thr	Pro	Leu	Pro	Val	Glu	Gly	Glu	Leu
				230					235					240
Cys	His	Asp	Pro	Ala	Ser	Arg	Leu	Leu	Asp	Leu	Ile	Thr	Trp	Glu
				245					250					255
Leu	Glu	Pro	Asp	Gly	Ala	Leu	Asp	Arg	Cys	Pro	Cys	Ala	Ser	Gly
				260					265					270
Leu	Leu	Cys	Gln	Pro	His	Ser	His	Ser	Leu	Val	Tyr	Val	Cys	Lys
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Pro	Arg	Glu	Val	Pro	Asp	Glu	Tyr	Glu	Val	Gly	Ser	Phe	Met	Glu
				305					310					315
Glu	Val	Arg	Gln	Glu	Leu	Glu	Asp	Leu	Glu	Arg	Ser	Leu	Thr	Glu
				320					325					330
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<211> 1395
<212> DNA
<213> Homo Sapien

<400> 9

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<210> 10

<211> 321

<212> PRT

<213> Homo Sapien

<400> 10

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			20						25					30

Pro	Gly	Leu	Met	Cys	Val	Phe	Gln	Gly	Tyr	Ser	Ser	Lys	Gly	Leu
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Ile	Gln	Arg	Ser	Val	Phe	Asn	Leu	Gln	Ile	Tyr	Gly	Val	Leu	Gly
			50						55					60

Leu	Phe	Trp	Thr	Leu	Asn	Trp	Val	Leu	Ala	Leu	Gly	Gln	Cys	Val
			65						70					75

Leu	Ala	Gly	Ala	Phe	Ala	Ser	Phe	Tyr	Trp	Ala	Phe	His	Lys	Pro
			80						85					90

Gln	Asp	Ile	Pro	Thr	Phe	Pro	Leu	Ile	Ser	Ala	Phe	Ile	Arg	Thr
			95						100					105

Leu	Arg	Tyr	His	Thr	Gly	Ser	Leu	Ala	Phe	Gly	Ala	Leu	Ile	Leu
			110						115					120

Thr	Leu	Val	Gln	Ile	Ala	Arg	Val	Ile	Leu	Glu	Tyr	Ile	Asp	His
			125						130					135

Lys	Leu	Arg	Gly	Val	Gln	Asn	Pro	Val	Ala	Arg	Cys	Ile	Met	Cys
			140						145					150

Cys	Phe	Lys	Cys	Cys	Leu	Trp	Cys	Leu	Glu	Lys	Phe	Ile	Lys	Phe
			155						160					165

Leu	Asn	Arg	Asn	Ala	Tyr	Ile	Met	Ile	Ala	Ile	Tyr	Gly	Lys	Asn
			170						175					180

Phe	Cys	Val	Ser	Ala	Lys	Asn	Ala	Phe	Met	Leu	Leu	Met	Arg	Asn
			185						190					195

Ile	Val	Arg	Val	Val	Val	Leu	Asp	Lys	Val	Thr	Asp	Leu	Leu	Leu
			200						205					210

Phe	Phe	Gly	Lys	Leu	Leu	Val	Val	Gly	Gly	Val	Gly	Val	Leu	Ser
			215						220					225

Phe	Phe	Phe	Phe	Ser	Gly	Arg	Ile	Pro	Gly	Leu	Gly	Lys	Asp	Phe
			230						235					240

Lys	Ser	Pro	His	Leu	Asn	Tyr	Tyr	Trp	Leu	Pro	Ile	Met	Thr	Ser	
				245					250					255	
Ile	Leu	Gly	Ala	Tyr	Val	Ile	Ala	Ser	Gly	Phe	Phe	Ser	Val	Phe	
				260					265					270	
Gly	Met	Cys	Val	Asp	Thr	Leu	Phe	Leu	Cys	Phe	Leu	Glu	Asp	Leu	
				275					280					285	
Glu	Arg	Asn	Asn	Gly	Ser	Leu	Asp	Arg	Pro	Tyr	Tyr	Met	Ser	Lys	
				290					295					300	
Ser	Leu	Leu	Lys	Ile	Leu	Gly	Lys	Lys	Asn	Glu	Ala	Pro	Pro	Asp	
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Asn	Lys	Lys	Arg	Lys	Lys										
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 <211> 1901
 <212> DNA
 <213> Homo Sapien

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<210> 12
<211> 457
<212> PRT
<213> Homo Sapien

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Ala Ser Arg Asn Ser Thr Val Ser Arg Leu Ile Phe Thr Phe Phe

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Leu Phe Leu Gly Val Leu Val Ser Ile Ile Met Leu Ser Pro Gly	50	55	60
Val Glu Ser Gln Leu Tyr Lys Leu Pro Trp Val Cys Glu Glu Gly	65	70	75
Ala Gly Ile Pro Thr Val Leu Gln Gly His Ile Asp Cys Gly Ser	80	85	90
Leu Leu Gly Tyr Arg Ala Val Tyr Arg Met Cys Phe Ala Thr Ala	95	100	105
Ala Phe Phe Phe Phe Phe Phe Thr Leu Leu Met Leu Cys Val Ser	110	115	120
Ser Ser Arg Asp Pro Arg Ala Ala Ile Gln Asn Gly Phe Trp Phe	125	130	135
Phe Lys Phe Leu Ile Leu Val Gly Leu Thr Val Gly Ala Phe Tyr	140	145	150
Ile Pro Asp Gly Ser Phe Thr Asn Ile Trp Phe Tyr Phe Gly Val	155	160	165
Val Gly Ser Phe Leu Phe Ile Leu Ile Gln Leu Val Leu Leu Ile	170	175	180
Asp Phe Ala His Ser Trp Asn Gln Arg Trp Leu Gly Lys Ala Glu	185	190	195
Glu Cys Asp Ser Arg Ala Trp Tyr Ala Gly Leu Phe Phe Phe Thr	200	205	210
Leu Leu Phe Tyr Leu Leu Ser Ile Ala Ala Val Ala Leu Met Phe	215	220	225
Met Tyr Tyr Thr Glu Pro Ser Gly Cys His Glu Gly Lys Val Phe	230	235	240
Ile Ser Leu Asn Leu Thr Phe Cys Val Cys Val Ser Ile Ala Ala	245	250	255
Val Leu Pro Lys Val Gln Asp Ala Gln Pro Asn Ser Gly Leu Leu	260	265	270
Gln Ala Ser Val Ile Thr Leu Tyr Thr Met Phe Val Thr Trp Ser	275	280	285
Ala Leu Ser Ser Ile Pro Glu Gln Lys Cys Asn Pro His Leu Pro	290	295	300
Thr Gln Leu Gly Asn Glu Thr Val Val Ala Gly Pro Glu Gly Tyr	305	310	315
Glu Thr Gln Trp Trp Asp Ala Pro Ser Ile Val Gly Leu Ile Ile			

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Phe Leu Leu Cys Thr Leu Phe Ile Ser Leu Arg Ser Ser Asp His					
	335		340		345
Arg Gln Val Asn Ser Leu Met Gln Thr Glu Glu Cys Pro Pro Met					
	350		355		360
Leu Asp Ala Thr Gln Gln Gln Gln Gln Gln Val Ala Ala Cys Glu					
	365		370		375
Gly Arg Ala Phe Asp Asn Glu Gln Asp Gly Val Thr Tyr Ser Tyr					
	380		385		390
Ser Phe Phe His Phe Cys Leu Val Leu Ala Ser Leu His Val Met					
	395		400		405
Met Thr Leu Thr Asn Trp Tyr Lys Pro Gly Glu Thr Arg Lys Met					
	410		415		420
Ile Ser Thr Trp Thr Ala Val Trp Val Lys Ile Cys Ala Ser Trp					
	425		430		435
Ala Gly Leu Leu Leu Tyr Leu Trp Thr Leu Val Ala Pro Leu Leu					
	440		445		450
Leu Arg Asn Arg Asp Phe Ser					
	455				

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 <212> DNA
 <213> Homo Sapien

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 gtgggtctttc tgatgggtcag ttttattccc ctctgaatc cgaagcagga 750
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 gtaaaatgtc accagacatt tgtattattt ttatcatgaa atcatgtttt 1450
 tctctgattg ttctgaaatg ttctaaatac tcttattttg aatgcacaaa 1500
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 ttaaaatgaa ctaaattaaa aa 1572

<210> 14
 <211> 234
 <212> PRT
 <213> Homo Sapien

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 Gln Ser Ser His Ala Ser Leu Arg Asn Ile His Ser Ile Asn Pro
 20 25 30
 Thr Gln Leu Met Ala Arg Ile Glu Ser Tyr Glu Gly Arg Glu Lys
 35 40 45
 Lys Gly Ile Ser Asp Val Arg Arg Thr Phe Cys Leu Phe Val Thr

50					55					60				
Phe	Asp	Leu	Leu	Phe	Val	Thr	Leu	Leu	Trp	Ile	Ile	Glu	Leu	Asn
				65					70					75
Val	Asn	Gly	Gly	Ile	Glu	Asn	Thr	Leu	Glu	Lys	Glu	Val	Met	Gln
				80					85					90
Tyr	Asp	Tyr	Tyr	Ser	Ser	Tyr	Phe	Asp	Ile	Phe	Leu	Leu	Ala	Val
				95					100					105
Phe	Arg	Phe	Lys	Val	Leu	Ile	Leu	Ala	Tyr	Ala	Val	Cys	Arg	Leu
				110					115					120
Arg	His	Trp	Trp	Ala	Ile	Ala	Leu	Thr	Thr	Ala	Val	Thr	Ser	Ala
				125					130					135
Phe	Leu	Leu	Ala	Lys	Val	Ile	Leu	Ser	Lys	Leu	Phe	Ser	Gln	Gly
				140					145					150
Ala	Phe	Gly	Tyr	Val	Leu	Pro	Ile	Ile	Ser	Phe	Ile	Leu	Ala	Trp
				155					160					165
Ile	Glu	Thr	Trp	Phe	Leu	Asp	Phe	Lys	Val	Leu	Pro	Gln	Glu	Ala
				170					175					180
Glu	Glu	Glu	Asn	Arg	Leu	Leu	Ile	Val	Gln	Asp	Ala	Ser	Glu	Arg
				185					190					195
Ala	Ala	Leu	Ile	Pro	Gly	Gly	Leu	Ser	Asp	Gly	Gln	Phe	Tyr	Ser
				200					205					210
Pro	Pro	Glu	Ser	Glu	Ala	Gly	Ser	Glu	Glu	Ala	Glu	Glu	Lys	Gln
				215					220					225
Asp	Ser	Glu	Lys	Pro	Leu	Leu	Glu	Leu						
				230										

<210> 15
 <211> 2768
 <212> DNA
 <213> Homo Sapien

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 ccgcctcccg ggacagaaga tgtgctccag ggtccctctg ctgctgccgc 150
 tgctcctgct actggccctg gggcctgggg tgcagggctg cccatccggc 200
 tgccagtgc gccagccaca gacagtcttc tgcactgcc gccaggggac 250
 cacggtgcc cgagacgtgc caccgacac ggtggggctg tacgtctttg 300
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 ggtcttccag ccactcgcca acctcagcaa cctggacctg acggccaaca 450
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 cgctcttacc tgggcaagaa ccgcatccgc cacatccagc ctgggtgcctt 550
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 tttccattt attctgggaa gatgtttttc aaactcagag acaaggactt 2700
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 aaaagatgaa gtgtgaaa 2768

<210> 16
 <211> 673
 <212> PRT
 <213> Homo Sapien

<400> 16
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 Ala Leu Gly Pro Gly Val Gln Gly Cys Pro Ser Gly Cys Gln Cys
 20 25 30
 Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
 35 40 45

Val	Pro	Arg	Asp	Val	Pro	Pro	Asp	Thr	Val	Gly	Leu	Tyr	Val	Phe	
				50					55					60	
Glu	Asn	Gly	Ile	Thr	Met	Leu	Asp	Ala	Gly	Ser	Phe	Ala	Gly	Leu	
				65					70					75	
Pro	Gly	Leu	Gln	Leu	Leu	Asp	Leu	Ser	Gln	Asn	Gln	Ile	Ala	Ser	
				80					85					90	
Leu	Pro	Ser	Gly	Val	Phe	Gln	Pro	Leu	Ala	Asn	Leu	Ser	Asn	Leu	
				95					100					105	
Asp	Leu	Thr	Ala	Asn	Arg	Leu	His	Glu	Ile	Thr	Asn	Glu	Thr	Phe	
				110					115					120	
Arg	Gly	Leu	Arg	Arg	Leu	Glu	Arg	Leu	Tyr	Leu	Gly	Lys	Asn	Arg	
				125					130					135	
Ile	Arg	His	Ile	Gln	Pro	Gly	Ala	Phe	Asp	Thr	Leu	Asp	Arg	Leu	
				140					145					150	
Leu	Glu	Leu	Lys	Leu	Gln	Asp	Asn	Glu	Leu	Arg	Ala	Leu	Pro	Pro	
				155					160					165	
Leu	Arg	Leu	Pro	Arg	Leu	Leu	Leu	Leu	Asp	Leu	Ser	His	Asn	Ser	
				170					175					180	
Leu	Leu	Ala	Leu	Glu	Pro	Gly	Ile	Leu	Asp	Thr	Ala	Asn	Val	Glu	
				185					190					195	
Ala	Leu	Arg	Leu	Ala	Gly	Leu	Gly	Leu	Gln	Gln	Leu	Asp	Glu	Gly	
				200					205					210	
Leu	Phe	Ser	Arg	Leu	Arg	Asn	Leu	His	Asp	Leu	Asp	Val	Ser	Asp	
				215					220					225	
Asn	Gln	Leu	Glu	Arg	Val	Pro	Pro	Val	Ile	Arg	Gly	Leu	Arg	Gly	
				230					235					240	
Leu	Thr	Arg	Leu	Arg	Leu	Ala	Gly	Asn	Thr	Arg	Ile	Ala	Gln	Leu	
				245					250					255	
Arg	Pro	Glu	Asp	Leu	Ala	Gly	Leu	Ala	Ala	Leu	Gln	Glu	Leu	Asp	
				260					265					270	
Val	Ser	Asn	Leu	Ser	Leu	Gln	Ala	Leu	Pro	Gly	Asp	Leu	Ser	Gly	
				275					280					285	
Leu	Phe	Pro	Arg	Leu	Arg	Leu	Leu	Ala	Ala	Ala	Arg	Asn	Pro	Phe	
				290					295					300	
Asn	Cys	Val	Cys	Pro	Leu	Ser	Trp	Phe	Gly	Pro	Trp	Val	Arg	Glu	
				305					310					315	
Ser	His	Val	Thr	Leu	Ala	Ser	Pro	Glu	Glu	Thr	Arg	Cys	His	Phe	
				320					325					330	

Pro	Pro	Lys	Asn	Ala	Gly	Arg	Leu	Leu	Leu	Glu	Leu	Asp	Tyr	Ala		335	340	345
Asp	Phe	Gly	Cys	Pro	Ala	Thr	Thr	Thr	Thr	Ala	Thr	Val	Pro	Thr		350	355	360
Thr	Arg	Pro	Val	Val	Arg	Glu	Pro	Thr	Ala	Leu	Ser	Ser	Ser	Leu		365	370	375
Ala	Pro	Thr	Trp	Leu	Ser	Pro	Thr	Ala	Pro	Ala	Thr	Glu	Ala	Pro		380	385	390
Ser	Pro	Pro	Ser	Thr	Ala	Pro	Pro	Thr	Val	Gly	Pro	Val	Pro	Gln		395	400	405
Pro	Gln	Asp	Cys	Pro	Pro	Ser	Thr	Cys	Leu	Asn	Gly	Gly	Thr	Cys		410	415	420
His	Leu	Gly	Thr	Arg	His	His	Leu	Ala	Cys	Leu	Cys	Pro	Glu	Gly		425	430	435
Phe	Thr	Gly	Leu	Tyr	Cys	Glu	Ser	Gln	Met	Gly	Gln	Gly	Thr	Arg		440	445	450
Pro	Ser	Pro	Thr	Pro	Val	Thr	Pro	Arg	Pro	Pro	Arg	Ser	Leu	Thr		455	460	465
Leu	Gly	Ile	Glu	Pro	Val	Ser	Pro	Thr	Ser	Leu	Arg	Val	Gly	Leu		470	475	480
Gln	Arg	Tyr	Leu	Gln	Gly	Ser	Ser	Val	Gln	Leu	Arg	Ser	Leu	Arg		485	490	495
Leu	Thr	Tyr	Arg	Asn	Leu	Ser	Gly	Pro	Asp	Lys	Arg	Leu	Val	Thr		500	505	510
Leu	Arg	Leu	Pro	Ala	Ser	Leu	Ala	Glu	Tyr	Thr	Val	Thr	Gln	Leu		515	520	525
Arg	Pro	Asn	Ala	Thr	Tyr	Ser	Val	Cys	Val	Met	Pro	Leu	Gly	Pro		530	535	540
Gly	Arg	Val	Pro	Glu	Gly	Glu	Glu	Ala	Cys	Gly	Glu	Ala	His	Thr		545	550	555
Pro	Pro	Ala	Val	His	Ser	Asn	His	Ala	Pro	Val	Thr	Gln	Ala	Arg		560	565	570
Glu	Gly	Asn	Leu	Pro	Leu	Leu	Ile	Ala	Pro	Ala	Leu	Ala	Ala	Val		575	580	585
Leu	Leu	Ala	Ala	Leu	Ala	Ala	Val	Gly	Ala	Ala	Tyr	Cys	Val	Arg		590	595	600
Arg	Gly	Arg	Ala	Met	Ala	Ala	Ala	Ala	Gln	Asp	Lys	Gly	Gln	Val		605	610	615

Gly	Pro	Gly	Ala	Gly	Pro	Leu	Glu	Leu	Glu	Gly	Val	Lys	Val	Pro
				620					625					630
Leu	Glu	Pro	Gly	Pro	Lys	Ala	Thr	Glu	Gly	Gly	Gly	Glu	Ala	Leu
				635					640					645
Pro	Ser	Gly	Ser	Glu	Cys	Glu	Val	Pro	Leu	Met	Gly	Phe	Pro	Gly
				650					655					660
Pro	Gly	Leu	Gln	Ser	Pro	Leu	His	Ala	Lys	Pro	Tyr	Ile		
				665					670					

<210> 17
 <211> 1672
 <212> DNA
 <213> Homo Sapien

<400> 17
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 gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga 200
 ccatactact gcaggcagag tagttgctgg tcaaataattt cttgattcag 250
 aagaatctga attagaatcc tctattcaag aagaggaaga cagcctcaag 300
 agccaagagg gggaaagtgt cacagaagat atcagctttc tagagtctcc 350
 aaatccagaa aacaaggact atgaagagcc aaagaaagta cggaaaccag 400
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 agatggcaga ctgtgggtgtg ctacaaccta tgactacaaa gcagatgaaa 550
 agtgggggctt ttgtgaaact gaagaagagg ctgctaagag acggcagatg 600
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 gatataacac atggaatcta catgtaaatg aaagttggtg gaggccacaa 1150
 tttttcttta aaatgattag tttggctgat tgcccctaaa aagagagac 1200
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 cagaatgact ccagagagct ctactttctg ttttttactt ttcatgattg 1450
 gctgtcttcc catttattct ggtcatttat tgctagtac actgtgctg 1500
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aa 1672

<210> 18
 <211> 301
 <212> PRT
 <213> Homo Sapien

<400> 18
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 Glu Ser Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val
 35 40 45
 Lys Asp His Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe
 50 55 60
 Leu Asp Ser Glu Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu
 65 70 75
 Glu Asp Ser Leu Lys Ser Gln Glu Gly Glu Ser Val Thr Glu Asp
 80 85 90
 Ile Ser Phe Leu Glu Ser Pro Asn Pro Glu Asn Lys Asp Tyr Glu
 95 100 105
 Glu Pro Lys Lys Val Arg Lys Pro Ala Leu Thr Ala Ile Glu Gly
 110 115 120

Thr	Ala	His	Gly	Glu	Pro	Cys	His	Phe	Pro	Phe	Leu	Phe	Leu	Asp	
				125					130					135	
Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp	Gly	Arg	Glu	Asp	Gly	Arg	
				140					145					150	
Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys	Ala	Asp	Glu	Lys	Trp	
				155					160					165	
Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys	Arg	Arg	Gln	Met	
				170					175					180	
Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys	Ile	Leu	Asn	
				185					190					195	
Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg	Tyr	Leu	
				200					205					210	
Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg	Val	
				215					220					225	
Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln	
				230					235					240	
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro	
				245					250					255	
Lys	Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	
				260					265					270	
Val	Asn	Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly	
				275					280					285	
Ala	Leu	Gly	Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Val	Ser	Arg	
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Leu

<210> 19
 <211> 1508
 <212> DNA
 <213> Homo Sapien

<400> 19
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 ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200
 tacattttta tcaactggatg tgactcgggc tttggaaact tggcagccag 250
 aacttttgat aaaaagggat ttcatgtaat cgctgcctgt ctgactgaat 300

caggatcaac agcttttaaag gcagaaacct cagagagact tcgtactgtg 350
cttctggatg tgaccgaccc agagaatgtc aagaggactg cccagtgggt 400
gaagaaccaa gttggggaga aaggtctctg gggctctgatc aataatgctg 450
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gcccattcaa aatgatcttt accgtggcct gcccctatgct tatgggtccc 1400
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taaaagataa gtcaacccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaaaaaaa 1508

<210> 20

<211> 319

<212> PRT

<213> Homo Sapien

<400> 20

Met Leu Phe Trp Val Leu Gly Leu Leu Ile Leu Cys Gly Phe Leu

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Trp Thr Arg Lys Gly Lys Leu Lys Ile Glu Asp Ile Thr Asp Lys	20	25	30
Tyr Ile Phe Ile Thr Gly Cys Asp Ser Gly Phe Gly Asn Leu Ala	35	40	45
Ala Arg Thr Phe Asp Lys Lys Gly Phe His Val Ile Ala Ala Cys	50	55	60
Leu Thr Glu Ser Gly Ser Thr Ala Leu Lys Ala Glu Thr Ser Glu	65	70	75
Arg Leu Arg Thr Val Leu Leu Asp Val Thr Asp Pro Glu Asn Val	80	85	90
Lys Arg Thr Ala Gln Trp Val Lys Asn Gln Val Gly Glu Lys Gly	95	100	105
Leu Trp Gly Leu Ile Asn Asn Ala Gly Val Pro Gly Val Leu Ala	110	115	120
Pro Thr Asp Trp Leu Thr Leu Glu Asp Tyr Arg Glu Pro Ile Glu	125	130	135
Val Asn Leu Phe Gly Leu Ile Ser Val Thr Leu Asn Met Leu Pro	140	145	150
Leu Val Lys Lys Ala Gln Gly Arg Val Ile Asn Val Ser Ser Val	155	160	165
Gly Gly Arg Leu Ala Ile Val Gly Gly Gly Tyr Thr Pro Ser Lys	170	175	180
Tyr Ala Val Glu Gly Phe Asn Asp Ser Leu Arg Arg Asp Met Lys	185	190	195
Ala Phe Gly Val His Val Ser Cys Ile Glu Pro Gly Leu Phe Lys	200	205	210
Thr Asn Leu Ala Asp Pro Val Lys Val Ile Glu Lys Lys Leu Ala	215	220	225
Ile Trp Glu Gln Leu Ser Pro Asp Ile Lys Gln Gln Tyr Gly Glu	230	235	240
Gly Tyr Ile Glu Lys Ser Leu Asp Lys Leu Lys Gly Asn Lys Ser	245	250	255
Tyr Val Asn Met Asp Leu Ser Pro Val Val Glu Cys Met Asp His	260	265	270
Ala Leu Thr Ser Leu Phe Pro Lys Thr His Tyr Ala Ala Gly Lys	275	280	285
Asp Ala Lys Ile Phe Trp Ile Pro Leu Ser His Met Pro Ala Ala			

	290	295	300
Leu Gln Asp Phe Leu Leu Leu Lys Gln Lys Ala Glu Leu Ala Asn			
	305	310	315

Pro Lys Ala Val

<210> 21
 <211> 1849
 <212> DNA
 <213> Homo Sapien

<400> 21
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 acggaaggtt ttcttcttgg ggaagtaaaa ggtgaagcca agaacagcat 150
 tactgattcc caaatggatg atgttgaagt tgtttataca attgacattc 200
 agaaatatat tccatgctat cagcttttta gcttttataa ttcttcaggc 250
 gaagtaaagtg agcaagcact gaagaaaata ttatcaaagtg tcaaaaagaa 300
 tgtggttaggt tggtaaaaat tccgtcgtca ttcagatcag atcatgacgt 350
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 gaccttggtt ttctgctatt aacaccaagt ataataacag aaagctgctc 450
 tactcatcga ctggaacatt ccttatataa acctcaaaaa ggactttttc 500
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 tataaaactg tatcaggttc ctgtatgtcc actgggttta gccgagcagt 600
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 ttcatgtggt atgtctttta aaaatagaca tgtttctaaa agtagctgta 950
 actacaacca ccattctgat gtagtagaca atctgacctt aatggtagaa 1000
 cactgaca ttctgaagc tagtcagct agtacaccac aaatcattaa 1050
 gcataaagcc ttagacttag atgacagatg gcaattcaag agatctcggg 1100

tgtagatatac acaagacaaa cgatctaaag caaatactgg tagtagtaac 1150
 caagataaag catccaaaat gagcagccca gaaacagatg aagaaattga 1200
 aaagatgaag ggttttggtg aatattcacg gtctcctaca ttttgatcct 1250
 ttttaacctta caaggagatt tttttatttg gctgatgggt aaagccaaac 1300
 atttctattg tttttactat gttgagctac ttgcagtaag ttcatttggt 1350
 tttactatgt tcacctgttt gcagtaatac acagataact cttagtgcac 1400
 ttacttcaca aagtactttt tcaaacaatca gatgctttta tttccaaacc 1450
 tttttttcac ctttctactaa gttggtgagg ggaaggctta cacagacaca 1500
 ttcttttagaa ttggaaaagt gagaccaggc acagtggctc acacctgtaa 1550
 tcccagcact tagggaagac aagtcaggag gattgattga agctaggagt 1600
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<210> 22
 <211> 409
 <212> PRT
 <213> Homo Sapien

<400> 22
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 Gly Ala Leu Ala Phe Gln His Leu Asn Thr Asp Ser Asp Thr Glu
 20 25 30
 Gly Phe Leu Leu Gly Glu Val Lys Gly Glu Ala Lys Asn Ser Ile
 35 40 45
 Thr Asp Ser Gln Met Asp Asp Val Glu Val Val Tyr Thr Ile Asp
 50 55 60
 Ile Gln Lys Tyr Ile Pro Cys Tyr Gln Leu Phe Ser Phe Tyr Asn
 65 70 75
 Ser Ser Gly Glu Val Asn Glu Gln Ala Leu Lys Lys Ile Leu Ser
 80 85 90
 Asn Val Lys Lys Asn Val Val Gly Trp Tyr Lys Phe Arg Arg His
 95 100 105

Ser	Asp	Gln	Ile	Met	Thr	Phe	Arg	Glu	Arg	Leu	Leu	His	Lys	Asn
				110					115					120
Leu	Gln	Glu	His	Phe	Ser	Asn	Gln	Asp	Leu	Val	Phe	Leu	Leu	Leu
				125					130					135
Thr	Pro	Ser	Ile	Ile	Thr	Glu	Ser	Cys	Ser	Thr	His	Arg	Leu	Glu
				140					145					150
His	Ser	Leu	Tyr	Lys	Pro	Gln	Lys	Gly	Leu	Phe	His	Arg	Val	Pro
				155					160					165
Leu	Val	Val	Ala	Asn	Leu	Gly	Met	Ser	Glu	Gln	Leu	Gly	Tyr	Lys
				170					175					180
Thr	Val	Ser	Gly	Ser	Cys	Met	Ser	Thr	Gly	Phe	Ser	Arg	Ala	Val
				185					190					195
Gln	Thr	His	Ser	Ser	Lys	Phe	Phe	Glu	Glu	Asp	Gly	Ser	Leu	Lys
				200					205					210
Glu	Val	His	Lys	Ile	Asn	Glu	Met	Tyr	Ala	Ser	Leu	Gln	Glu	Glu
				215					220					225
Leu	Lys	Ser	Ile	Cys	Lys	Lys	Val	Glu	Asp	Ser	Glu	Gln	Ala	Val
				230					235					240
Asp	Lys	Leu	Val	Lys	Asp	Val	Asn	Arg	Leu	Lys	Arg	Glu	Ile	Glu
				245					250					255
Lys	Arg	Arg	Gly	Ala	Gln	Ile	Gln	Ala	Ala	Arg	Glu	Lys	Asn	Ile
				260					265					270
Gln	Lys	Asp	Pro	Gln	Glu	Asn	Ile	Phe	Leu	Cys	Gln	Ala	Leu	Arg
				275					280					285
Thr	Phe	Phe	Pro	Asn	Ser	Glu	Phe	Leu	His	Ser	Cys	Val	Met	Ser
				290					295					300
Leu	Lys	Asn	Arg	His	Val	Ser	Lys	Ser	Ser	Cys	Asn	Tyr	Asn	His
				305					310					315
His	Leu	Asp	Val	Val	Asp	Asn	Leu	Thr	Leu	Met	Val	Glu	His	Thr
				320					325					330
Asp	Ile	Pro	Glu	Ala	Ser	Pro	Ala	Ser	Thr	Pro	Gln	Ile	Ile	Lys
				335					340					345
His	Lys	Ala	Leu	Asp	Leu	Asp	Asp	Arg	Trp	Gln	Phe	Lys	Arg	Ser
				350					355					360
Arg	Leu	Leu	Asp	Thr	Gln	Asp	Lys	Arg	Ser	Lys	Ala	Asn	Thr	Gly
				365					370					375
Ser	Ser	Asn	Gln	Asp	Lys	Ala	Ser	Lys	Met	Ser	Ser	Pro	Glu	Thr
				380					385					390

Asp Glu Glu Ile Glu Lys Met Lys Gly Phe Gly Glu Tyr Ser Arg
395 400 405

Ser Pro Thr Phe

<210> 23
<211> 2651
<212> DNA
<213> Homo Sapien

<400> 23
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cgccgcccac accctctgcg gtccccgcgg cgctgccac cttccctcc 150
ttcccccggt cccgcctcg ccggccagtc agcttgccgg gttcgctgcc 200
ccgcgaaacc ccgaggtcac cagcccgcg cttctgcttc ctgggcccgc 250
cgccgcctcc acgcctcct tctccctgg ccgggcgctt ggcaccgggg 300
accgttgctt gacgcgaggc ccagctctac ttttcgcccc gcgtctcttc 350
cgctgctcg cctcttcac caactccaac tctttctccc tccagctcca 400
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 aatttctcgt tccatctctg aaagtgcctt cagtgtcgc ttcagaccac 1600
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 ggttgacacc agcaaaccag acatactgat ccttcgtcaa atcatggctc 1900
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c 2651

<210> 24

<211> 556

<212> PRT

<213> Homo Sapien

<400> 24

Met	Ala	Arg	Phe	Gly	Leu	Pro	Ala	Leu	Leu	Cys	Thr	Leu	Ala	Val	
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Leu	Ser	Ala	Ala	Leu	Leu	Ala	Ala	Glu	Leu	Lys	Ser	Lys	Ser	Cys	
				20					25					30	
Ser	Glu	Val	Arg	Arg	Leu	Tyr	Val	Ser	Lys	Gly	Phe	Asn	Lys	Asn	
				35					40					45	
Asp	Ala	Pro	Leu	His	Glu	Ile	Asn	Gly	Asp	His	Leu	Lys	Ile	Cys	
				50					55					60	
Pro	Gln	Gly	Ser	Thr	Cys	Cys	Ser	Gln	Glu	Met	Glu	Glu	Lys	Tyr	
				65					70					75	
Ser	Leu	Gln	Ser	Lys	Asp	Asp	Phe	Lys	Ser	Val	Val	Ser	Glu	Gln	
				80					85					90	
Cys	Asn	His	Leu	Gln	Ala	Val	Phe	Ala	Ser	Arg	Tyr	Lys	Lys	Phe	
				95					100					105	
Asp	Glu	Phe	Phe	Lys	Glu	Leu	Leu	Glu	Asn	Ala	Glu	Lys	Ser	Leu	
				110					115					120	
Asn	Asp	Met	Phe	Val	Lys	Thr	Tyr	Gly	His	Leu	Tyr	Met	Gln	Asn	
				125					130					135	
Ser	Glu	Leu	Phe	Lys	Asp	Leu	Phe	Val	Glu	Leu	Lys	Arg	Tyr	Tyr	
				140					145					150	
Val	Val	Gly	Asn	Val	Asn	Leu	Glu	Glu	Met	Leu	Asn	Asp	Phe	Trp	
				155					160					165	
Ala	Arg	Leu	Leu	Glu	Arg	Met	Phe	Arg	Leu	Val	Asn	Ser	Gln	Tyr	
				170					175					180	
His	Phe	Thr	Asp	Glu	Tyr	Leu	Glu	Cys	Val	Ser	Lys	Tyr	Thr	Glu	
				185					190					195	
Gln	Leu	Lys	Pro	Phe	Gly	Asp	Val	Pro	Arg	Lys	Leu	Lys	Leu	Gln	
				200					205					210	
Val	Thr	Arg	Ala	Phe	Val	Ala	Ala	Arg	Thr	Phe	Ala	Gln	Gly	Leu	
				215					220					225	
Ala	Val	Ala	Gly	Asp	Val	Val	Ser	Lys	Val	Ser	Val	Val	Asn	Pro	

				230					235					240
Thr	Ala	Gln	Cys	Thr	His	Ala	Leu	Leu	Lys	Met	Ile	Tyr	Cys	Ser
				245					250					255
His	Cys	Arg	Gly	Leu	Val	Thr	Val	Lys	Pro	Cys	Tyr	Asn	Tyr	Cys
				260					265					270
Ser	Asn	Ile	Met	Arg	Gly	Cys	Leu	Ala	Asn	Gln	Gly	Asp	Leu	Asp
				275					280					285
Phe	Glu	Trp	Asn	Asn	Phe	Ile	Asp	Ala	Met	Leu	Met	Val	Ala	Glu
				290					295					300
Arg	Leu	Glu	Gly	Pro	Phe	Asn	Ile	Glu	Ser	Val	Met	Asp	Pro	Ile
				305					310					315
Asp	Val	Lys	Ile	Ser	Asp	Ala	Ile	Met	Asn	Met	Gln	Asp	Asn	Ser
				320					325					330
Val	Gln	Val	Ser	Gln	Lys	Val	Phe	Gln	Gly	Cys	Gly	Pro	Pro	Lys
				335					340					345
Pro	Leu	Pro	Ala	Gly	Arg	Ile	Ser	Arg	Ser	Ile	Ser	Glu	Ser	Ala
				350					355					360
Phe	Ser	Ala	Arg	Phe	Arg	Pro	His	His	Pro	Glu	Glu	Arg	Pro	Thr
				365					370					375
Thr	Ala	Ala	Gly	Thr	Ser	Leu	Asp	Arg	Leu	Val	Thr	Asp	Val	Lys
				380					385					390
Glu	Lys	Leu	Lys	Gln	Ala	Lys	Lys	Phe	Trp	Ser	Ser	Leu	Pro	Ser
				395					400					405
Asn	Val	Cys	Asn	Asp	Glu	Arg	Met	Ala	Ala	Gly	Asn	Gly	Asn	Glu
				410					415					420
Asp	Asp	Cys	Trp	Asn	Gly	Lys	Gly	Lys	Ser	Arg	Tyr	Leu	Phe	Ala
				425					430					435
Val	Thr	Gly	Asn	Gly	Leu	Ala	Asn	Gln	Gly	Asn	Asn	Pro	Glu	Val
				440					445					450
Gln	Val	Asp	Thr	Ser	Lys	Pro	Asp	Ile	Leu	Ile	Leu	Arg	Gln	Ile
				455					460					465
Met	Ala	Leu	Arg	Val	Met	Thr	Ser	Lys	Met	Lys	Asn	Ala	Tyr	Asn
				470					475					480
Gly	Asn	Asp	Val	Asp	Phe	Phe	Asp	Ile	Ser	Asp	Glu	Ser	Ser	Gly
				485					490					495
Glu	Gly	Ser	Gly	Ser	Gly	Cys	Glu	Tyr	Gln	Gln	Cys	Pro	Ser	Glu
				500					505					510
Phe	Asp	Tyr	Asn	Ala	Thr	Asp	His	Ala	Gly	Lys	Ser	Ala	Asn	Glu

	515		520		525									
Lys	Ala	Asp	Ser	Ala	Gly	Val	Arg	Pro	Gly	Ala	Gln	Ala	Tyr	Leu
	530								535					540
Leu	Thr	Val	Phe	Cys	Ile	Leu	Phe	Leu	Val	Met	Gln	Arg	Glu	Trp
			545						550					555

Arg

<210> 25
 <211> 870
 <212> DNA
 <213> Homo Sapien

<400> 25
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 cgatgaaagt tctaattctt tccctcctcc tgttgctgcc actaatgctg 200
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 gtgagtgcaa agattgggtc ctgagagccc cgagaagaaa attcatgaca 350
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 tgtgaagaaa acaagacacc aaaggcacca cagaaagcca aacaagcatt 450
 ccagagcctg ccagcaattt ctcaaacaat gtcagctaag aagctttgct 500
 ctgcctttgt aggagctctg agcgcccact cttccaatta aacatttctca 550
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<210> 26
 <211> 119
 <212> PRT
 <213> Homo Sapien

<400> 26

Met	Lys	Val	Leu	Ile	Ser	Ser	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Met
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Leu	Met	Ser	Met	Val	Ser	Ser	Ser	Leu	Asn	Pro	Gly	Val	Ala	Arg
				20					25					30
Gly	His	Arg	Asp	Arg	Gly	Gln	Ala	Ser	Arg	Arg	Trp	Leu	Gln	Glu
				35					40					45
Gly	Gly	Gln	Glu	Cys	Glu	Cys	Lys	Asp	Trp	Phe	Leu	Arg	Ala	Pro
				50					55					60
Arg	Arg	Lys	Phe	Met	Thr	Val	Ser	Gly	Leu	Pro	Lys	Lys	Gln	Cys
				65					70					75
Pro	Cys	Asp	His	Phe	Lys	Gly	Asn	Val	Lys	Lys	Thr	Arg	His	Gln
				80					85					90
Arg	His	His	Arg	Lys	Pro	Asn	Lys	His	Ser	Arg	Ala	Cys	Gln	Gln
				95					100					105
Phe	Leu	Lys	Gln	Cys	Gln	Leu	Arg	Ser	Phe	Ala	Leu	Pro	Leu	
				110					115					

<210> 27

<211> 1371

<212> DNA

<213> Homo Sapien

<400> 27

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tgggctgctg gcagcccctg tgcaaaagct acttccccta cctgatggcc 200

gtgctgactc ccaagagcaa ccgcaagatg gagagcaaga aacgggagct 250

cttcagccag ataaaggggc ttacaggagc ctccgggaaa gtggccctac 300

tggagctggg ctgcggaacc ggagccaact ttcagttcta cccaccgggc 350

tgcagggtca cctgcctaga cccaaatccc cactttgaga agttcctgac 400

aaagagcatg gctgagaaca ggcacctcca atatgagcgg tttgtggtgg 450

ctcctggaga ggacatgaga cagctggctg atggctccat ggatgtggtg 500

gtctgcactc tgggtgctgtg ctctgtgcag agcccaagga aggtcctgca 550

ggaggtccgg agagtactga gaccgggagg tgtgctcttt ttctgggagc 600

atgtggcaga accatatgga agctgggcct tcatgtggca gcaagttttc 650

gagccacct ggaaacacat tggggatggc tgctgcctca ccagagagac 700

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 gacagtgaaa aagctctact tctacgtga cccagggagg aaacactagg 1050
 accctgttgt atcctcaact gcaagtttct ggactagtct cccaacgttt 1100
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 ccaccttctt cctgagctgg gggcaccagg gagaatcaga gatgctgggg 1300
 atgccagagc aagactcaaa gaggcagagg ttttgttctc aaatattttt 1350
 taataaatag acgaaaccac g 1371

<210> 28
 <211> 277
 <212> PRT
 <213> Homo Sapien

<400> 28
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 Thr Leu Pro Leu His Leu Met Ala Leu Leu Gly Cys Trp Gln Pro
 20 25 30
 Leu Cys Lys Ser Tyr Phe Pro Tyr Leu Met Ala Val Leu Thr Pro
 35 40 45
 Lys Ser Asn Arg Lys Met Glu Ser Lys Lys Arg Glu Leu Phe Ser
 50 55 60
 Gln Ile Lys Gly Leu Thr Gly Ala Ser Gly Lys Val Ala Leu Leu
 65 70 75
 Glu Leu Gly Cys Gly Thr Gly Ala Asn Phe Gln Phe Tyr Pro Pro
 80 85 90
 Gly Cys Arg Val Thr Cys Leu Asp Pro Asn Pro His Phe Glu Lys
 95 100 105
 Phe Leu Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu

	110		115		120
Arg Phe Val Val	Ala Pro Gly Glu Asp	Met Arg Gln Leu Ala Asp			
	125	130	135		
Gly Ser Met Asp	Val Val Val Cys Thr	Leu Val Leu Cys Ser Val			
	140	145	150		
Gln Ser Pro Arg	Lys Val Leu Gln Glu	Val Arg Arg Val Leu Arg			
	155	160	165		
Pro Gly Gly Val	Leu Phe Phe Trp Glu	His Val Ala Glu Pro Tyr			
	170	175	180		
Gly Ser Trp Ala	Phe Met Trp Gln Gln	Val Phe Glu Pro Thr Trp			
	185	190	195		
Lys His Ile Gly	Asp Gly Cys Cys Leu	Thr Arg Glu Thr Trp Lys			
	200	205	210		
Asp Leu Glu Asn	Ala Gln Phe Ser Glu	Ile Gln Met Glu Arg Gln			
	215	220	225		
Pro Pro Pro Leu	Lys Trp Leu Pro Val	Gly Pro His Ile Met Gly			
	230	235	240		
Lys Ala Val Lys	Gln Ser Phe Pro Ser	Ser Lys Ala Leu Ile Cys			
	245	250	255		
Ser Phe Pro Ser	Leu Gln Leu Glu Gln	Ala Thr His Gln Pro Ile			
	260	265	270		
Tyr Leu Pro Leu	Arg Gly Thr				
	275				

<210> 29
 <211> 494
 <212> DNA
 <213> Homo Sapien

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 gactggtcgg tgcccagaaa gtctcttctg ccactgacgc ccccatcagg 150
 gattgggcct tctttccccc ttcttttctg tgtctcctgc ctcacgggcc 200
 tgccatgacc tgcagccaag cccagccccg tggggaaggg gagaaagtgg 250
 gggatggcta agaaagctgg gagatagggg acagaagagg gtagtgggtg 300
 ggctaggggg gctgccttat ttaaagtggg tgtttatgat tcttatacta 350
 atttatacaa agatattaag gccctgttca ttaagaaatt gttcccttcc 400

cctgtgttca atgtttgtaa agattgttct gtgtaaatat gtctttataa 450

taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30

<211> 73

<212> PRT

<213> Homo Sapien

<400> 30

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Ser	Cys	Leu	Glu	Trp	Gly	Leu	Val	Gly	Ala	Gln	Lys	Val	Ser	Ser
				20				25						30

Ala	Thr	Asp	Ala	Pro	Ile	Arg	Asp	Trp	Ala	Phe	Phe	Pro	Pro	Ser
				35				40						45

Phe	Leu	Cys	Leu	Leu	Pro	His	Arg	Pro	Ala	Met	Thr	Cys	Ser	Gln
				50				55						60

Ala	Gln	Pro	Arg	Gly	Glu	Gly	Glu	Lys	Val	Gly	Asp	Gly
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<210> 31

<211> 1660

<212> DNA

<213> Homo Sapien

<400> 31

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atgatgttga caccctccac cgaattctaa gtggaatcat gtcgggaaga 200

gatacaatcc ttggcctgtg taccctcgca ttagccttgt ctttggccat 250

gatgtttacc ttcagattca tcaccacct tctggttcac attttcattt 300

cattgggttat tttgggattg ttgtttgtct gcggtgtttt atggtggctg 350

tattatgact ataccaacga cctcagcata gaattggaca cagaaaggga 400

aaatatgaag tgcgtgctgg ggtttgctat cgtatccaca ggcacacgg 450

cagtgtgct cgtcttgatt tttgttctca gaaagagaat aaaattgaca 500

gttgagcttt tccaaatcac aaataaagcc atcagcagtg ctcccttcct 550

gctgttccag ccactgtgga catttgccat cctcattttc ttctgggtcc 600

tctgggtggc tgtgctgctg agcctgggaa ctgcaggagc tgcccagggt 650

atggaaggcg gccaaagtga atataagccc ctttcgggca ttcggtacat 700

gtgggtcgtag catttaattg gcctcatctg gactagtga ttcattccttg 750
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 tctcttcttc taccatcaag gaaccgttgt gaaaggggtca tttttaatct 900
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 aaagaacagc agcatgggtgc attgtccagg tacctgttcc gatgctgcta 1000
 ctgctgtttc tgggtgtcttg acaaatacct gctccatctc aaccagaatg 1050
 catatactac aactgctatt aatgggacag atttctgtac atcagcaaaa 1100
 gatgcattca aaatcttgtc caagaactca agtcacttta catctattaa 1150
 ctgctttgga gacttcataa tttttctagg aaaggtgtta gtgggtgtgtt 1200
 tcaactgtttt tggaggactc atggctttta actacaatcg ggcattccag 1250
 gtgtggggcag tccctctgtt attggtagct ttttttgcct acttagtagc 1300
 ccatagtttt ttatctgtgt ttgaaactgt gctggatgca cttttcctgt 1350
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 cagaactcca ggccattgtg agatagatac ccatttaggt atctgtacct 1550
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<210> 32
 <211> 445
 <212> PRT
 <213> Homo Sapien

<400> 32
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 Leu Leu Val His Ile Phe Ile Ser Leu Val Ile Leu Gly Leu Leu
 35 40 45
 Phe Val Cys Gly Val Leu Trp Trp Leu Tyr Tyr Asp Tyr Thr Asn
 50 55 60

Asp	Leu	Ser	Ile	Glu	Leu	Asp	Thr	Glu	Arg	Glu	Asn	Met	Lys	Cys	
				65					70					75	
Val	Leu	Gly	Phe	Ala	Ile	Val	Ser	Thr	Gly	Ile	Thr	Ala	Val	Leu	
				80					85					90	
Leu	Val	Leu	Ile	Phe	Val	Leu	Arg	Lys	Arg	Ile	Lys	Leu	Thr	Val	
				95					100					105	
Glu	Leu	Phe	Gln	Ile	Thr	Asn	Lys	Ala	Ile	Ser	Ser	Ala	Pro	Phe	
				110					115					120	
Leu	Leu	Phe	Gln	Pro	Leu	Trp	Thr	Phe	Ala	Ile	Leu	Ile	Phe	Phe	
				125					130					135	
Trp	Val	Leu	Trp	Val	Ala	Val	Leu	Leu	Ser	Leu	Gly	Thr	Ala	Gly	
				140					145					150	
Ala	Ala	Gln	Val	Met	Glu	Gly	Gly	Gln	Val	Glu	Tyr	Lys	Pro	Leu	
				155					160					165	
Ser	Gly	Ile	Arg	Tyr	Met	Trp	Ser	Tyr	His	Leu	Ile	Gly	Leu	Ile	
				170					175					180	
Trp	Thr	Ser	Glu	Phe	Ile	Leu	Ala	Cys	Gln	Gln	Met	Thr	Ile	Ala	
				185					190					195	
Gly	Ala	Val	Val	Thr	Cys	Tyr	Phe	Asn	Arg	Ser	Lys	Asn	Asp	Pro	
				200					205					210	
Pro	Asp	His	Pro	Ile	Leu	Ser	Ser	Leu	Ser	Ile	Leu	Phe	Phe	Tyr	
				215					220					225	
His	Gln	Gly	Thr	Val	Val	Lys	Gly	Ser	Phe	Leu	Ile	Ser	Val	Val	
				230					235					240	
Arg	Ile	Pro	Arg	Ile	Ile	Val	Met	Tyr	Met	Gln	Asn	Ala	Leu	Lys	
				245					250					255	
Glu	Gln	Gln	His	Gly	Ala	Leu	Ser	Arg	Tyr	Leu	Phe	Arg	Cys	Cys	
				260					265					270	
Tyr	Cys	Cys	Phe	Trp	Cys	Leu	Asp	Lys	Tyr	Leu	Leu	His	Leu	Asn	
				275					280					285	
Gln	Asn	Ala	Tyr	Thr	Thr	Thr	Ala	Ile	Asn	Gly	Thr	Asp	Phe	Cys	
				290					295					300	
Thr	Ser	Ala	Lys	Asp	Ala	Phe	Lys	Ile	Leu	Ser	Lys	Asn	Ser	Ser	
				305					310					315	
His	Phe	Thr	Ser	Ile	Asn	Cys	Phe	Gly	Asp	Phe	Ile	Ile	Phe	Leu	
				320					325					330	
Gly	Lys	Val	Leu	Val	Val	Cys	Phe	Thr	Val	Phe	Gly	Gly	Leu	Met	
				335					340					345	

Ala	Phe	Asn	Tyr	Asn	Arg	Ala	Phe	Gln	Val	Trp	Ala	Val	Pro	Leu	
				350					355					360	
Leu	Leu	Val	Ala	Phe	Phe	Ala	Tyr	Leu	Val	Ala	His	Ser	Phe	Leu	
				365					370					375	
Ser	Val	Phe	Glu	Thr	Val	Leu	Asp	Ala	Leu	Phe	Leu	Cys	Phe	Ala	
				380					385					390	
Val	Asp	Leu	Glu	Thr	Asn	Asp	Gly	Ser	Ser	Glu	Lys	Pro	Tyr	Phe	
				395					400					405	
Met	Asp	Gln	Glu	Phe	Leu	Ser	Phe	Val	Lys	Arg	Ser	Asn	Lys	Leu	
				410					415					420	
Asn	Asn	Ala	Arg	Ala	Gln	Gln	Asp	Lys	His	Ser	Leu	Arg	Asn	Glu	
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Glu	Gly	Thr	Glu	Leu	Gln	Ala	Ile	Val	Arg						
				440					445						

<210> 33
 <211> 2773
 <212> DNA
 <213> Homo Sapien

<400> 33
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 aagggaaaaa gaatattcat tctgtgtggt gaaaattttt tgaaaaaaaa 150

 attgccttct tcaaacaagg gtgtcattct gatatttatg aggactgttg 200

 ttctcactat gaaggcatct gttattgaaa tgttccttgt tttgctggtg 250

 actggagtac attcaaacaa agaaacggca aagaagatta aaaggcccaa 300

 gtccactgtg cctcagatca actgcgatgt caaagccgga aagatcatcg 350

 atcctgagtt cattgtgaaa tgtccagcag gatgccaaga ccccaaatac 400

 catgtttatg gcactgacgt gtatgcatcc tactccagtg tgtgtggcgc 450

 tgccgtacac agtgggtgtgc ttgataattc aggagggaaa atacttggtc 500

 ggaaggttgc tggacagtct ggttacaaag ggagttattc caacggtgtc 550

 caatcggtat ccctaccacg atggagagaa tcctttatcg tcttagaaag 600

 taaacccaaa aaggggtgtaa cctaccatc agctcttaca tactcatcat 650

 cgaaaagtcc agctgcccaa gcaggtgaga ccacaaaagc ctatcagagg 700

 ccacctattc cagggacaac tgcacagccg gtcactctga tgcagcttct 750

 ggctgtcact gtagctgtgg ccacccccac caccttgcca aggccatccc 800

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<210> 34
 <211> 678
 <212> PRT
 <213> Homo Sapien

<400> 34
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 Ala Lys Lys Ile Lys Arg Pro Lys Phe Thr Val Pro Gln Ile Asn
 35 40 45
 Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val
 50 55 60
 Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly
 65 70 75
 Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val
 80 85 90
 His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg
 95 100 105
 Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly
 110 115 120
 Val Gln Ser Leu Ser Leu Pro Arg Trp Arg Glu Ser Phe Ile Val
 125 130 135

Leu	Glu	Ser	Lys	Pro	Lys	Lys	Gly	Val	Thr	Tyr	Pro	Ser	Ala	Leu	140	145	150
Thr	Tyr	Ser	Ser	Ser	Lys	Ser	Pro	Ala	Ala	Gln	Ala	Gly	Glu	Thr	155	160	165
Thr	Lys	Ala	Tyr	Gln	Arg	Pro	Pro	Ile	Pro	Gly	Thr	Thr	Ala	Gln	170	175	180
Pro	Val	Thr	Leu	Met	Gln	Leu	Leu	Ala	Val	Thr	Val	Ala	Val	Ala	185	190	195
Thr	Pro	Thr	Thr	Leu	Pro	Arg	Pro	Ser	Pro	Ser	Ala	Ala	Ser	Thr	200	205	210
Thr	Ser	Ile	Pro	Arg	Pro	Gln	Ser	Val	Gly	His	Arg	Ser	Gln	Glu	215	220	225
Met	Asp	Leu	Trp	Ser	Thr	Ala	Thr	Tyr	Thr	Ser	Ser	Gln	Asn	Arg	230	235	240
Pro	Arg	Ala	Asp	Pro	Gly	Ile	Gln	Arg	Gln	Asp	Pro	Ser	Gly	Ala	245	250	255
Ala	Phe	Gln	Lys	Pro	Val	Gly	Ala	Asp	Val	Ser	Leu	Gly	Leu	Val	260	265	270
Pro	Lys	Glu	Glu	Leu	Ser	Thr	Gln	Ser	Leu	Glu	Pro	Val	Ser	Leu	275	280	285
Gly	Asp	Pro	Asn	Cys	Lys	Ile	Asp	Leu	Ser	Phe	Leu	Ile	Asp	Gly	290	295	300
Ser	Thr	Ser	Ile	Gly	Lys	Arg	Arg	Phe	Arg	Ile	Gln	Lys	Gln	Leu	305	310	315
Leu	Ala	Asp	Val	Ala	Gln	Ala	Leu	Asp	Ile	Gly	Pro	Ala	Gly	Pro	320	325	330
Leu	Met	Gly	Val	Val	Gln	Tyr	Gly	Asp	Asn	Pro	Ala	Thr	His	Phe	335	340	345
Asn	Leu	Lys	Thr	His	Thr	Asn	Ser	Arg	Asp	Leu	Lys	Thr	Ala	Ile	350	355	360
Glu	Lys	Ile	Thr	Gln	Arg	Gly	Gly	Leu	Ser	Asn	Val	Gly	Arg	Ala	365	370	375
Ile	Ser	Phe	Val	Thr	Lys	Asn	Phe	Phe	Ser	Lys	Ala	Asn	Gly	Asn	380	385	390
Arg	Ser	Gly	Ala	Pro	Asn	Val	Val	Val	Val	Met	Val	Asp	Gly	Trp	395	400	405
Pro	Thr	Asp	Lys	Val	Glu	Glu	Ala	Ser	Arg	Leu	Ala	Arg	Glu	Ser	410	415	420

Gly	Ile	Asn	Ile	Phe	Phe	Ile	Thr	Ile	Glu	Gly	Ala	Ala	Glu	Asn	
				425					430					435	
Glu	Lys	Gln	Tyr	Val	Val	Glu	Pro	Asn	Phe	Ala	Asn	Lys	Ala	Val	
				440					445					450	
Cys	Arg	Thr	Asn	Gly	Phe	Tyr	Ser	Leu	His	Val	Gln	Ser	Trp	Phe	
				455					460					465	
Gly	Leu	His	Lys	Thr	Leu	Gln	Pro	Leu	Val	Lys	Arg	Val	Cys	Asp	
				470					475					480	
Thr	Asp	Arg	Leu	Ala	Cys	Ser	Lys	Thr	Cys	Leu	Asn	Ser	Ala	Asp	
				485					490					495	
Ile	Gly	Phe	Val	Ile	Asp	Gly	Ser	Ser	Ser	Val	Gly	Thr	Gly	Asn	
				500					505					510	
Phe	Arg	Thr	Val	Leu	Gln	Phe	Val	Thr	Asn	Leu	Thr	Lys	Glu	Phe	
				515					520					525	
Glu	Ile	Ser	Asp	Thr	Asp	Thr	Arg	Ile	Gly	Ala	Val	Gln	Tyr	Thr	
				530					535					540	
Tyr	Glu	Gln	Arg	Leu	Glu	Phe	Gly	Phe	Asp	Lys	Tyr	Ser	Ser	Lys	
				545					550					555	
Pro	Asp	Ile	Leu	Asn	Ala	Ile	Lys	Arg	Val	Gly	Tyr	Trp	Ser	Gly	
				560					565					570	
Gly	Thr	Ser	Thr	Gly	Ala	Ala	Ile	Asn	Phe	Ala	Leu	Glu	Gln	Leu	
				575					580					585	
Phe	Lys	Lys	Ser	Lys	Pro	Asn	Lys	Arg	Lys	Leu	Met	Ile	Leu	Ile	
				590					595					600	
Thr	Asp	Gly	Arg	Ser	Tyr	Asp	Asp	Val	Arg	Ile	Pro	Ala	Met	Ala	
				605					610					615	
Ala	His	Leu	Lys	Gly	Val	Ile	Thr	Tyr	Ala	Ile	Gly	Val	Ala	Trp	
				620					625					630	
Ala	Ala	Gln	Glu	Glu	Leu	Glu	Val	Ile	Ala	Thr	His	Pro	Ala	Arg	
				635					640					645	
Asp	His	Ser	Phe	Phe	Val	Asp	Glu	Phe	Asp	Asn	Leu	His	Gln	Tyr	
				650					655					660	
Val	Pro	Arg	Ile	Ile	Gln	Asn	Ile	Cys	Thr	Glu	Phe	Asn	Ser	Gln	
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Pro Arg Asn

<210> 35
 <211> 2095
 <212> DNA

<213> Homo Sapien

<400> 35

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caacaaaaaa cttaagcttt aatttcatct ggaattccac agttttctta 200
gctccctgga cccggttgac ctgttggtc tccccgctgg ctgctctatc 250
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ccacatgcca ttattaactt cacattctac aaaaagccta gaaggacagg 1350
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 <211> 331
 <212> PRT
 <213> Homo Sapien

<400> 36
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 35 40 45
 Arg Val Asn Trp Met Tyr Phe Tyr Glu Tyr Glu Pro Ile Tyr Arg
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 Gln Asp Phe His Phe Thr Leu Arg Glu His Ser Asn Cys Ser His
 65 70 75
 Gln Asn Pro Phe Leu Val Ile Leu Val Thr Ser His Pro Ser Asp
 80 85 90
 Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys
 95 100 105

Ser	Trp	Trp	Gly	Tyr	Glu	Val	Leu	Thr	Phe	Phe	Leu	Leu	Gly	Gln	110	115	120
Glu	Ala	Glu	Lys	Glu	Asp	Lys	Met	Leu	Ala	Leu	Ser	Leu	Glu	Asp	125	130	135
Glu	His	Leu	Leu	Tyr	Gly	Asp	Ile	Ile	Arg	Gln	Asp	Phe	Leu	Asp	140	145	150
Thr	Tyr	Asn	Asn	Leu	Thr	Leu	Lys	Thr	Ile	Met	Ala	Phe	Arg	Trp	155	160	165
Val	Thr	Glu	Phe	Cys	Pro	Asn	Ala	Lys	Tyr	Val	Met	Lys	Thr	Asp	170	175	180
Thr	Asp	Val	Phe	Ile	Asn	Thr	Gly	Asn	Leu	Val	Lys	Tyr	Leu	Leu	185	190	195
Asn	Leu	Asn	His	Ser	Glu	Lys	Phe	Phe	Thr	Gly	Tyr	Pro	Leu	Ile	200	205	210
Asp	Asn	Tyr	Ser	Tyr	Arg	Gly	Phe	Tyr	Gln	Lys	Thr	His	Ile	Ser	215	220	225
Tyr	Gln	Glu	Tyr	Pro	Phe	Lys	Val	Phe	Pro	Pro	Tyr	Cys	Ser	Gly	230	235	240
Leu	Gly	Tyr	Ile	Met	Ser	Arg	Asp	Leu	Val	Pro	Arg	Ile	Tyr	Glu	245	250	255
Met	Met	Gly	His	Val	Lys	Pro	Ile	Lys	Phe	Glu	Asp	Val	Tyr	Val	260	265	270
Gly	Ile	Cys	Leu	Asn	Leu	Leu	Lys	Val	Asn	Ile	His	Ile	Pro	Glu	275	280	285
Asp	Thr	Asn	Leu	Phe	Phe	Leu	Tyr	Arg	Ile	His	Leu	Asp	Val	Cys	290	295	300
Gln	Leu	Arg	Arg	Val	Ile	Ala	Ala	His	Gly	Phe	Ser	Ser	Lys	Glu	305	310	315
Ile	Ile	Thr	Phe	Trp	Gln	Val	Met	Leu	Arg	Asn	Thr	Thr	Cys	His	320	325	330

Tyr

<210> 37

<211> 2846

<212> DNA

<213> Homo Sapien

<400> 37

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<210> 38
 <211> 720
 <212> PRT
 <213> Homo Sapien

<400> 38

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Glu	Ala	Cys	Pro	Gly	Ala	Glu	Trp	Asn	Ile	Met	Cys	Arg	Glu	Cys	35	40	45	
Cys	Glu	Tyr	Asp	Gln	Ile	Glu	Cys	Val	Cys	Pro	Gly	Lys	Arg	Glu	50	55	60	
Val	Val	Gly	Tyr	Thr	Ile	Pro	Cys	Cys	Arg	Asn	Glu	Glu	Asn	Glu	65	70	75	
Cys	Asp	Ser	Cys	Leu	Ile	His	Pro	Gly	Cys	Thr	Ile	Phe	Glu	Asn	80	85	90	
Cys	Lys	Ser	Cys	Arg	Asn	Gly	Ser	Trp	Gly	Gly	Thr	Leu	Asp	Asp	95	100	105	
Phe	Tyr	Val	Lys	Gly	Phe	Tyr	Cys	Ala	Glu	Cys	Arg	Ala	Gly	Trp	110	115	120	
Tyr	Gly	Gly	Asp	Cys	Met	Arg	Cys	Gly	Gln	Val	Leu	Arg	Ala	Pro	125	130	135	
Lys	Gly	Gln	Ile	Leu	Leu	Glu	Ser	Tyr	Pro	Leu	Asn	Ala	His	Cys	140	145	150	
Glu	Trp	Thr	Ile	His	Ala	Lys	Pro	Gly	Phe	Val	Ile	Gln	Leu	Arg	155	160	165	
Phe	Val	Met	Leu	Ser	Leu	Glu	Phe	Asp	Tyr	Met	Cys	Gln	Tyr	Asp	170	175	180	
Tyr	Val	Glu	Val	Arg	Asp	Gly	Asp	Asn	Arg	Asp	Gly	Gln	Ile	Ile	185	190	195	
Lys	Arg	Val	Cys	Gly	Asn	Glu	Arg	Pro	Ala	Pro	Ile	Gln	Ser	Ile	200	205	210	
Gly	Ser	Ser	Leu	His	Val	Leu	Phe	His	Ser	Asp	Gly	Ser	Lys	Asn	215	220	225	
Phe	Asp	Gly	Phe	His	Ala	Ile	Tyr	Glu	Glu	Ile	Thr	Ala	Cys	Ser	230	235	240	
Ser	Ser	Pro	Cys	Phe	His	Asp	Gly	Thr	Cys	Val	Leu	Asp	Lys	Ala	245	250	255	
Gly	Ser	Tyr	Lys	Cys	Ala	Cys	Leu	Ala	Gly	Tyr	Thr	Gly	Gln	Arg	260	265	270	
Cys	Glu	Asn	Leu	Leu	Glu	Glu	Arg	Asn	Cys	Ser	Asp	Pro	Gly	Gly	275	280	285	

Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro Gly Leu Ile	290	295	300
Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe Phe Cys	305	310	315
Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys Gln	320	325	330
Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala	335	340	345
Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu	350	355	360
Pro Met Gln Val Gln Ser Arg Glu Thr Pro Leu His Gln Leu Tyr	365	370	375
Ser Ala Ala Phe Ser Lys Gln Lys Leu Gln Ser Ala Pro Thr Lys	380	385	390
Lys Pro Ala Leu Pro Phe Gly Asp Leu Pro Met Gly Tyr Gln His	395	400	405
Leu His Thr Gln Leu Gln Tyr Glu Cys Ile Ser Pro Phe Tyr Arg	410	415	420
Arg Leu Gly Ser Ser Arg Arg Thr Cys Leu Arg Thr Gly Lys Trp	425	430	435
Ser Gly Arg Ala Pro Ser Cys Ile Pro Ile Cys Gly Lys Ile Glu	440	445	450
Asn Ile Thr Ala Pro Lys Thr Gln Gly Leu Arg Trp Pro Trp Gln	455	460	465
Ala Ala Ile Tyr Arg Arg Thr Ser Gly Val His Asp Gly Ser Leu	470	475	480
His Lys Gly Ala Trp Phe Leu Val Cys Ser Gly Ala Leu Val Asn	485	490	495
Glu Arg Thr Val Val Val Ala Ala His Cys Val Thr Asp Leu Gly	500	505	510
Lys Val Thr Met Ile Lys Thr Ala Asp Leu Lys Val Val Leu Gly	515	520	525
Lys Phe Tyr Arg Asp Asp Asp Arg Asp Glu Lys Thr Ile Gln Ser	530	535	540
Leu Gln Ile Ser Ala Ile Ile Leu His Pro Asn Tyr Asp Pro Ile	545	550	555
Leu Leu Asp Ala Asp Ile Ala Ile Leu Lys Leu Leu Asp Lys Ala	560	565	570

Arg	Ile	Ser	Thr	Arg	Val	Gln	Pro	Ile	Cys	Leu	Ala	Ala	Ser	Arg	
				575					580					585	
Asp	Leu	Ser	Thr	Ser	Phe	Gln	Glu	Ser	His	Ile	Thr	Val	Ala	Gly	
				590					595					600	
Trp	Asn	Val	Leu	Ala	Asp	Val	Arg	Ser	Pro	Gly	Phe	Lys	Asn	Asp	
				605					610					615	
Thr	Leu	Arg	Ser	Gly	Val	Val	Ser	Val	Val	Asp	Ser	Leu	Leu	Cys	
				620					625					630	
Glu	Glu	Gln	His	Glu	Asp	His	Gly	Ile	Pro	Val	Ser	Val	Thr	Asp	
				635					640					645	
Asn	Met	Phe	Cys	Ala	Ser	Trp	Glu	Pro	Thr	Ala	Pro	Ser	Asp	Ile	
				650					655					660	
Cys	Thr	Ala	Glu	Thr	Gly	Gly	Ile	Ala	Ala	Val	Ser	Phe	Pro	Gly	
				665					670					675	
Arg	Ala	Ser	Pro	Glu	Pro	Arg	Trp	His	Leu	Met	Gly	Leu	Val	Ser	
				680					685					690	
Trp	Ser	Tyr	Asp	Lys	Thr	Cys	Ser	His	Arg	Leu	Ser	Thr	Ala	Phe	
				695					700					705	
Thr	Lys	Val	Leu	Pro	Phe	Lys	Asp	Trp	Ile	Glu	Arg	Asn	Met	Lys	
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<210> 39

<211> 2571

<212> DNA

<213> Homo Sapien

<400> 39

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35 40 45
Arg Arg Ser Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr
50 55 60
Ala Thr Ala Pro Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser
65 70 75
Leu Met Thr Asp Glu Pro Gly Leu Asp Asn Pro Ala Tyr Val Ser
80 85 90
Ser Ala Glu Asp Gly Gln Pro Ala Ile Ser Pro Val Asp Ser Gly
95 100 105
Arg Ser Asn Arg Thr Arg Ala Arg Pro Phe Glu Arg Ser Thr Ile
110 115 120
Arg Ser Arg Ser Phe Lys Lys Ile Asn Arg Ala Leu Ser Val Leu

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Arg	Arg	Thr	Lys	Ser	Gly	Ser	Ala	Val	Ala	Asn	His	Ala	Asp	Gln
				140					145					150
Gly	Arg	Glu	Asn	Ser	Glu	Asn	Thr	Thr	Ala	Pro	Glu	Val	Phe	Pro
				155					160					165
Arg	Leu	Tyr	His	Leu	Ile	Pro	Asp	Gly	Glu	Ile	Thr	Ser	Ile	Lys
				170					175					180
Ile	Asn	Arg	Val	Asp	Pro	Ser	Glu	Ser	Leu	Ser	Ile	Arg	Leu	Val
				185					190					195
Gly	Gly	Ser	Glu	Thr	Pro	Leu	Val	His	Ile	Ile	Ile	Gln	His	Ile
				200					205					210
Tyr	Arg	Asp	Gly	Val	Ile	Ala	Arg	Asp	Gly	Arg	Leu	Leu	Pro	Gly
				215					220					225
Asp	Ile	Ile	Leu	Lys	Val	Asn	Gly	Met	Asp	Ile	Ser	Asn	Val	Pro
				230					235					240
His	Asn	Tyr	Ala	Val	Arg	Leu	Leu	Arg	Gln	Pro	Cys	Gln	Val	Leu
				245					250					255
Trp	Leu	Thr	Val	Met	Arg	Glu	Gln	Lys	Phe	Arg	Ser	Arg	Asn	Asn
				260					265					270
Gly	Gln	Ala	Pro	Asp	Ala	Tyr	Arg	Pro	Arg	Asp	Asp	Ser	Phe	His
				275					280					285
Val	Ile	Leu	Asn	Lys	Ser	Ser	Pro	Glu	Glu	Gln	Leu	Gly	Ile	Lys
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Leu	Asp	Gly	Gly	Val	Ala	Tyr	Arg	His	Gly	Gln	Leu	Glu	Glu	Asn
				320					325					330
Asp	Arg	Val	Leu	Ala	Ile	Asn	Gly	His	Asp	Leu	Arg	Tyr	Gly	Ser
				335					340					345
Pro	Glu	Ser	Ala	Ala	His	Leu	Ile	Gln	Ala	Ser	Glu	Arg	Arg	Val
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His	Leu	Val	Val	Ser	Arg	Gln	Val	Arg	Gln	Arg	Ser	Pro	Asp	Ile
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Phe	Gln	Glu	Ala	Gly	Trp	Asn	Ser	Asn	Gly	Ser	Trp	Ser	Pro	Gly
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Pro	Gly	Glu	Arg	Ser	Asn	Thr	Pro	Lys	Pro	Leu	His	Pro	Thr	Ile
				395					400					405
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Ser	Leu	Gly	Met	Thr	Val	Ala	Gly	Gly	Ala	Ser	His	Arg	Glu	Trp
				425					430					435
Asp	Leu	Pro	Ile	Tyr	Val	Ile	Ser	Val	Glu	Pro	Gly	Gly	Val	Ile
				440					445					450
Ser	Arg	Asp	Gly	Arg	Ile	Lys	Thr	Gly	Asp	Ile	Leu	Leu	Asn	Val
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Asp	Gly	Val	Glu	Leu	Thr	Glu	Val	Ser	Arg	Ser	Glu	Ala	Val	Ala
				470					475					480
Leu	Leu	Lys	Arg	Thr	Ser	Ser	Ser	Ile	Val	Leu	Lys	Ala	Leu	Glu
				485					490					495
Val	Lys	Glu	Tyr	Glu	Pro	Gln	Glu	Asp	Cys	Ser	Ser	Pro	Ala	Ala
				500					505					510
Leu	Asp	Ser	Asn	His	Asn	Met	Ala	Pro	Pro	Ser	Asp	Trp	Ser	Pro
				515					520					525
Ser	Trp	Val	Met	Trp	Leu	Glu	Leu	Pro	Arg	Cys	Leu	Tyr	Asn	Cys
				530					535					540
Lys	Asp	Ile	Val	Leu	Arg	Arg	Asn	Thr	Ala	Gly	Ser	Leu	Gly	Phe
				545					550					555
Cys	Ile	Val	Gly	Gly	Tyr	Glu	Glu	Tyr	Asn	Gly	Asn	Lys	Pro	Phe
				560					565					570
Phe	Ile	Lys	Ser	Ile	Val	Glu	Gly	Thr	Pro	Ala	Tyr	Asn	Asp	Gly
				575					580					585
Arg	Ile	Arg	Cys	Gly	Asp	Ile	Leu	Leu	Ala	Val	Asn	Gly	Arg	Ser
				590					595					600
Thr	Ser	Gly	Met	Ile	His	Ala	Cys	Leu	Ala	Arg	Leu	Leu	Lys	Glu
				605					610					615
Leu	Lys	Gly	Arg	Ile	Thr	Leu	Thr	Ile	Val	Ser	Trp	Pro	Gly	Thr
				620					625					630

Phe Leu

<210> 41

<211> 1964

<212> DNA

<213> Homo Sapien

<400> 41

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agctcaactt gaagctttct tgcctgcagt gaagcagaga gatagatatt 100

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 caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200
 gggccaccag taactacttc gtgggtgccca ttcaagagat tcctaaagca 250
 aaggagtcca tggctaattt ccataagacc ctcatTTTgg ggaaggga 300
 aactctgact aatgaagcat ccacgaagaa ggtagaactt gacaactgtc 350
 cttctgtgtc tccttacctc agaggccaga gcaagctcat tttcaaacca 400
 gatctcactt tggaagaggt acaggcagaa aatcccaaag tgtccagagg 450
 ccggtatcgc cctcaggaat gtaaagcttt acagagggtc gccatcctcg 500
 ttccccaccg gaacagagag aaacacctga tgtacctgct ggaacatctg 550
 catcccttcc tgcagaggca gcagctggat tatggcatct acgtcatcca 600
 ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtgggct 650
 atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700
 gtggacctgg tacccgagaa tgactttaac ctttacaagt gtgaggagca 750
 tccaagcat ctggtgggtg gcaggaacag cactgggtac aggttacgtt 800
 acagtggata ttttgggggt gttactgccc taagcagaga gcagtttttc 850
 aaggtgaatg gattctctaa caactactgg ggatggggag gcgaagacga 900
 tgacctcaga ctcagggttg agctccaaag aatgaaaatt tcccggcccc 950
 tgctgaagt gggtaaatat acaatggtct tccacactag agacaaaggc 1000
 aatgaggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050
 ctggagaaca gatgggttga gtagttgttc ttataaatta gtatctgtgg 1100
 aacacaatcc tttatatatc aacatcacag tggatttctg gtttggtgca 1150
 tgaccctgga tcttttgggtg atgtttggaa gaactgattc tttgtttgca 1200
 ataattttgg cctagagact tcaaatagta gcacacatta agaacctgtt 1250
 acagctcatt gttgagctga atttttcctt tttgtatttt cttagcagag 1300
 ctctggtga tgtagagtat aaaacagttg taacaagaca gctttcttag 1350
 tcattttgat catgagggtt aaatattgta atatggatac ttgaaggact 1400
 ttatataaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450
 tggttgaagg agatttattt aaatttgaag taatatatta tgggataaaa 1500
 ggccacagga aataagactg ctgaatgtct gagagaacca gagttgttct 1550

cgtccaaggt agaaaggtac gaagatacaa tactgttatt catttatcct 1600
 gtacaatcat ctgtgaagtg gtggtgtcag gtgagaaggc gtccacaaaa 1650
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 ggtagcagga ggggtggagtg tcggctgcaa aggcagcagt agctgagctg 1750
 gttgcaggtg ctgatagcct tcaggggagg acctgccag gtatgccttc 1800
 cagtgatgcc caccagagaa tacattctct attagttttt aaagagtttt 1850
 tgtaaaatga ttttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
 acatattaac taataataaa tatgtctatc aaatacctct gtagtaaaat 1950
 gtgaaaaagc aaaa 1964

<210> 42
 <211> 344
 <212> PRT
 <213> Homo Sapien

<400> 42
 Met Gly Phe Asn Leu Thr Phe His Leu Ser Tyr Lys Phe Arg Leu
 1 5 10 15
 Leu Leu Leu Leu Thr Leu Cys Leu Thr Val Val Gly Trp Ala Thr
 20 25 30
 Ser Asn Tyr Phe Val Gly Ala Ile Gln Glu Ile Pro Lys Ala Lys
 35 40 45
 Glu Phe Met Ala Asn Phe His Lys Thr Leu Ile Leu Gly Lys Gly
 50 55 60
 Lys Thr Leu Thr Asn Glu Ala Ser Thr Lys Lys Val Glu Leu Asp
 65 70 75
 Asn Cys Pro Ser Val Ser Pro Tyr Leu Arg Gly Gln Ser Lys Leu
 80 85 90
 Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu Val Gln Ala Glu Asn
 95 100 105
 Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln Glu Cys Lys Ala
 110 115 120
 Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn Arg Glu Lys
 125 130 135
 His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu Gln Arg
 140 145 150
 Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu Gly
 155 160 165

Lys	Lys	Phe	Asn	Arg	Ala	Lys	Leu	Leu	Asn	Val	Gly	Tyr	Leu	Glu	
			170						175					180	
Ala	Leu	Lys	Glu	Glu	Asn	Trp	Asp	Cys	Phe	Ile	Phe	His	Asp	Val	
			185						190					195	
Asp	Leu	Val	Pro	Glu	Asn	Asp	Phe	Asn	Leu	Tyr	Lys	Cys	Glu	Glu	
			200						205					210	
His	Pro	Lys	His	Leu	Val	Val	Gly	Arg	Asn	Ser	Thr	Gly	Tyr	Arg	
			215						220					225	
Leu	Arg	Tyr	Ser	Gly	Tyr	Phe	Gly	Gly	Val	Thr	Ala	Leu	Ser	Arg	
			230						235					240	
Glu	Gln	Phe	Phe	Lys	Val	Asn	Gly	Phe	Ser	Asn	Asn	Tyr	Trp	Gly	
			245						250					255	
Trp	Gly	Gly	Glu	Asp	Asp	Asp	Leu	Arg	Leu	Arg	Val	Glu	Leu	Gln	
			260						265					270	
Arg	Met	Lys	Ile	Ser	Arg	Pro	Leu	Pro	Glu	Val	Gly	Lys	Tyr	Thr	
			275						280					285	
Met	Val	Phe	His	Thr	Arg	Asp	Lys	Gly	Asn	Glu	Val	Asn	Ala	Glu	
			290						295					300	
Arg	Met	Lys	Leu	Leu	His	Gln	Val	Ser	Arg	Val	Trp	Arg	Thr	Asp	
			305						310					315	
Gly	Leu	Ser	Ser	Cys	Ser	Tyr	Lys	Leu	Val	Ser	Val	Glu	His	Asn	
			320						325					330	
Pro	Leu	Tyr	Ile	Asn	Ile	Thr	Val	Asp	Phe	Trp	Phe	Gly	Ala		
			335						340						

<210> 43

<211> 485

<212> DNA

<213> Homo Sapien

<400> 43

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gctcaagacc cagcagtggg acagccagac agacggcacg atggcactga 50
gctcccagat ctgggccgct tgctctctgc tctctctcct cctcgccagc 100
ctgaccagtg gctctgtttt cccacaacag acgggacaac ttgcagagct 150
gcaaccccag gacagagctg gagccagggc cagctggatg cccatgttcc 200
agaggcgaag gaggcgagac acccacttcc ccatctgcat tttctgctgc 250
ggctgctgtc atcgatcaaa gtgtgggatg tgctgcaaga cgtagaacct 300
acctgccctg ccccgctccc ctcccttctt tattttattcc tgctgcccc 350
gaacataggt cttggaataa aatggctggg tcttttgttt tccaaaaaaa 400

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 485

<210> 44

<211> 84

<212> PRT

<213> Homo Sapien

<400> 44

Met	Ala	Leu	Ser	Ser	Gln	Ile	Trp	Ala	Ala	Cys	Leu	Leu	Leu	Leu
1				5					10					15

Leu	Leu	Leu	Ala	Ser	Leu	Thr	Ser	Gly	Ser	Val	Phe	Pro	Gln	Gln
				20					25					30

Thr	Gly	Gln	Leu	Ala	Glu	Leu	Gln	Pro	Gln	Asp	Arg	Ala	Gly	Ala
				35					40					45

Arg	Ala	Ser	Trp	Met	Pro	Met	Phe	Gln	Arg	Arg	Arg	Arg	Arg	Asp
				50					55					60

Thr	His	Phe	Pro	Ile	Cys	Ile	Phe	Cys	Cys	Gly	Cys	Cys	His	Arg
				65					70					75

Ser	Lys	Cys	Gly	Met	Cys	Cys	Lys	Thr
				80				

<210> 45

<211> 1076

<212> DNA

<213> Homo Sapien

<400> 45

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caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100

gcctctggac ccgtgaaaga gctggtcggt tccgttggtg gggccgtgac 150

tttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200

tcaacacaac ccctcttgtc accatacagc cagaaggggg cactatcata 250

gtgacccaaa atcgtaatag ggagagagta gacttcccag atggaggcta 300

ctccctgaag ctgagcaaac tgaagaagaa tgactcaggg atctactatg 350

tggggatata cagctcatca ctccagcagc cctccacca ggagtacgtg 400

ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450

gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcattggaac 500

atggggaaga ggatgtgatt tatacctgga aggcctggg gcaagcagcc 550

aatgagtccc ataatgggtc catcctcccc atctcctgga gatggggaga 600
aagtgatatg accttcatct gcgttgccag gaaccctgtc agcagaaaact 650
tctcaagccc catccttgcc aggaagctct gtgaagggtgc tgctgatgac 700
ccagattcct ccatgggtcct cctgtgtctc ctggttggtgc ccctcctgct 750
cagtctcttt gtactggggc tatttctttg gtttctgaag agagagagac 800
aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaaact 850
cctaacatat gccccattc tggagagAAC acagagtacg acacaatccc 900
tcacactaat agaacaatcc taaaggaaga tccagcaaat acgggtttact 950
ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000
atgccagaca caccaaggct atttgctat gagaatgtta tctagacagc 1050
agtgcactcc cctaagtctc tgctca 1076

<210> 46
<211> 335
<212> PRT
<213> Homo Sapien

<400> 46
Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp
1 5 10 15
Gln Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val
20 25 30
Gly Ser Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val
35 40 45
Lys Gln Val Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu
50 55 60
Val Thr Ile Gln Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn
65 70 75
Arg Asn Arg Glu Arg Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu
80 85 90
Lys Leu Ser Lys Leu Lys Lys Asn Asp Ser Gly Ile Tyr Tyr Val
95 100 105
Gly Ile Tyr Ser Ser Ser Leu Gln Gln Pro Ser Thr Gln Glu Tyr
110 115 120
Val Leu His Val Tyr Glu His Leu Ser Lys Pro Lys Val Thr Met
125 130 135
Gly Leu Gln Ser Asn Lys Asn Gly Thr Cys Val Thr Asn Leu Thr
140 145 150

Cys	Cys	Met	Glu	His	Gly	Glu	Glu	Asp	Val	Ile	Tyr	Thr	Trp	Lys	155	160	165
Ala	Leu	Gly	Gln	Ala	Ala	Asn	Glu	Ser	His	Asn	Gly	Ser	Ile	Leu	170	175	180
Pro	Ile	Ser	Trp	Arg	Trp	Gly	Glu	Ser	Asp	Met	Thr	Phe	Ile	Cys	185	190	195
Val	Ala	Arg	Asn	Pro	Val	Ser	Arg	Asn	Phe	Ser	Ser	Pro	Ile	Leu	200	205	210
Ala	Arg	Lys	Leu	Cys	Glu	Gly	Ala	Ala	Asp	Asp	Pro	Asp	Ser	Ser	215	220	225
Met	Val	Leu	Leu	Cys	Leu	Leu	Leu	Val	Pro	Leu	Leu	Leu	Ser	Leu	230	235	240
Phe	Val	Leu	Gly	Leu	Phe	Leu	Trp	Phe	Leu	Lys	Arg	Glu	Arg	Gln	245	250	255
Glu	Glu	Tyr	Ile	Glu	Glu	Lys	Lys	Arg	Val	Asp	Ile	Cys	Arg	Glu	260	265	270
Thr	Pro	Asn	Ile	Cys	Pro	His	Ser	Gly	Glu	Asn	Thr	Glu	Tyr	Asp	275	280	285
Thr	Ile	Pro	His	Thr	Asn	Arg	Thr	Ile	Leu	Lys	Glu	Asp	Pro	Ala	290	295	300
Asn	Thr	Val	Tyr	Ser	Thr	Val	Glu	Ile	Pro	Lys	Lys	Met	Glu	Asn	305	310	315
Pro	His	Ser	Leu	Leu	Thr	Met	Pro	Asp	Thr	Pro	Arg	Leu	Phe	Ala	320	325	330
Tyr	Glu	Asn	Val	Ile											335		

<210> 47

<211> 766

<212> DNA

<213> Homo Sapien

<400> 47

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ggctcgagcg tttctgagcc aggggtgacc atgacctgct gcgaaggatg 50
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ttctcaatgc gatacctcta attgtcagct tagttgagga agaccaattt 150
tctcaaaacc ccattctcttg ctttgagtgg tggttcccag gaattatagg 200
agcaggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250
aaagagcgtg ctgcaacaac agaactggaa tgtttctttc atcatttttc 300

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agtgtgatca cagtcattgg tgctctgtat tgcattgctga tatccatcca 350
 ggctctctta aaaggctctc tcatgtgtaa ttctccaagc aacagtaatg 400
 ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450
 ttcaacttgc agtgggtttt caatgactct tgtgcacctc ctactgggtt 500
 caataaaccc accagtaacg acaccatggc gagtggctgg agagcatcta 550
 gtttccactt cgattctgaa gaaaacaaac ataggcttat ccacttctca 600
 gtatttttag gtctattgct tgttggaatt ctggaggtcc tgtttgggct 650
 cagtcagata gtcacggtt tccttggctg tctgtgtgga gtctctaagc 700
 gaagaagtca aattgtgtag tttaatggga ataaaatgta agtatcagta 750
 gtttgaaaaa aaaaaa 766

<210> 48
 <211> 229
 <212> PRT
 <213> Homo Sapien

<400> 48
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 Leu Val Leu Leu Leu Leu Gly Val Val Leu Asn Ala Ile Pro Leu
 20 25 30
 Ile Val Ser Leu Val Glu Glu Asp Gln Phe Ser Gln Asn Pro Ile
 35 40 45
 Ser Cys Phe Glu Trp Trp Phe Pro Gly Ile Ile Gly Ala Gly Leu
 50 55 60
 Met Ala Ile Pro Ala Thr Thr Met Ser Leu Thr Ala Arg Lys Arg
 65 70 75
 Ala Cys Cys Asn Asn Arg Thr Gly Met Phe Leu Ser Ser Phe Phe
 80 85 90
 Ser Val Ile Thr Val Ile Gly Ala Leu Tyr Cys Met Leu Ile Ser
 95 100 105
 Ile Gln Ala Leu Leu Lys Gly Pro Leu Met Cys Asn Ser Pro Ser
 110 115 120
 Asn Ser Asn Ala Asn Cys Glu Phe Ser Leu Lys Asn Ile Ser Asp
 125 130 135
 Ile His Pro Glu Ser Phe Asn Leu Gln Trp Phe Phe Asn Asp Ser
 140 145 150
 Cys Ala Pro Pro Thr Gly Phe Asn Lys Pro Thr Ser Asn Asp Thr

	155		160		165									
Met	Ala	Ser	Gly	Trp	Arg	Ala	Ser	Ser	Phe	His	Phe	Asp	Ser	Glu
	170								175					180
Glu	Asn	Lys	His	Arg	Leu	Ile	His	Phe	Ser	Val	Phe	Leu	Gly	Leu
	185								190					195
Leu	Leu	Val	Gly	Ile	Leu	Glu	Val	Leu	Phe	Gly	Leu	Ser	Gln	Ile
	200								205					210
Val	Ile	Gly	Phe	Leu	Gly	Cys	Leu	Cys	Gly	Val	Ser	Lys	Arg	Arg
	215								220					225

Ser Gln Ile Val

<210> 49
 <211> 636
 <212> DNA
 <213> Homo Sapien

<400> 49
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 ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150
 cgccccagtg cctctcccc tgcagccctg cccctcgaac tgtgacatgg 200
 agagagtgac cctggccctt ctctactgg caggcctgac tgccttgga 250
 gccaatgacc catttgccaa taaagacgat cccttctact atgactggaa 300
 aaacctgcag ctgagcggac tgatctgcgg agggctcctg gccattgctg 350
 ggatcgcggc agttctgagt ggcaaagca aatacaagag cagccagaag 400
 cagcacagtc ctgtacctga gaaggccatc cactcatca ctccaggctc 450
 tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500
 taacactggc cccagcacc tcctccctg ggaggcctta tcctcaagga 550
 aggacttctc tccaagggca ggctgttagg cccctttctg atcaggagga 600
 ttctttatga attaaactcg cccaccacc cctca 636

<210> 50
 <211> 89
 <212> PRT
 <213> Homo Sapien

<400> 50
 Met Glu Arg Val Thr Leu Ala Leu Leu Leu Leu Ala Gly Leu Thr
 1 5 10 15

Ala	Leu	Glu	Ala	Asn	Asp	Pro	Phe	Ala	Asn	Lys	Asp	Asp	Pro	Phe
				20					25					30
Tyr	Tyr	Asp	Trp	Lys	Asn	Leu	Gln	Leu	Ser	Gly	Leu	Ile	Cys	Gly
				35					40					45
Gly	Leu	Leu	Ala	Ile	Ala	Gly	Ile	Ala	Ala	Val	Leu	Ser	Gly	Lys
				50					55					60
Cys	Lys	Tyr	Lys	Ser	Ser	Gln	Lys	Gln	His	Ser	Pro	Val	Pro	Glu
				65					70					75
Lys	Ala	Ile	Pro	Leu	Ile	Thr	Pro	Gly	Ser	Ala	Thr	Thr	Cys	
				80					85					

<210> 51
 <211> 1734
 <212> DNA
 <213> Homo Sapien

<400> 51
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 gaccagagg gagggaggac agggagtcgg aaggaggagg acagaggagg 100
 gcacagagac gcagagcaag ggcggcaagg aggagaccct ggtgggagga 150
 agacactctg gagagagagg gggctgggca gagatgaagt tccaggggcc 200
 cctggcctgc ctctgctgg ccctctgcct gggcagtgagg gaggctggcc 250
 ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300
 ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
 caaagaggcc ggaggggagc ctggctctaa agtcagttag gcccttggcc 400
 aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
 ggcgcagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500
 gggaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550
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 ggtgcttggg aaacttctgg aggccatggc atctttggct ctcaaggtgg 650
 ccttgagggc cagggccagg gcaatcctgg aggtctgggg actccgtggg 700
 tccacggata ccccggaac tcagcaggca gctttggaat gaatcctcag 750
 ggagctccct ggggtcaagg aggcaatgga gggccaccaa actttgggac 800
 caacactcag ggagctgtgg ccagcctgg ctatggttca gtgagagcca 850
 gcaaccagaa tgaagggtgc acgaatcccc caccatctgg ctgaggtgga 900

ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtgg 950
 cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
 gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050
 agtgggtggca gcagtggcaa cagtgggtggc agcagaggtg acagcggcag 1100
 tgagtccctcc tggggatcca gcaccggctc ctctccggc aaccacggtg 1150
 ggagcggcgg aggaaatgga cataaaccgc ggtgtgaaaa gccagggaat 1200
 gaagcccgcg ggagcgggga atctgggatt cagggttca gaggacaggg 1250
 agtttccagc aacatgaggg aaataagcaa agagggcaat cgcctccttg 1300
 gaggctcttg agacaattat cgggggcaag ggtcgagctg gggcagtgga 1350
 ggaggtgacg ctgttggttg agtcaatact gtgaactctg agacgtctcc 1400
 tgggatgttt aactttgaca ctttctggaa gaattttaaa tccaagctgg 1450
 gtttcatcaa ctgggatgcc ataaacaagg accagagaag ctctcgcac 1500
 ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550
 ccctccttaa aacaccaccc tctcatcact aatctcagcc cttgcccttg 1600
 aaataaacct tagctgcccc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1734

<210> 52
 <211> 440
 <212> PRT
 <213> Homo Sapien

<400> 52
 Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys
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 Leu Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser
 20 25 30
 Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
 35 40 45
 Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
 50 55 60
 Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
 65 70 75
 Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly
 80 85 90

Ala	Ala	Asp	Ala	Leu	Gly	Asn	Arg	Val	Gly	Glu	Ala	Ala	His	Ala		95	100	105
Leu	Gly	Asn	Thr	Gly	His	Glu	Ile	Gly	Arg	Gln	Ala	Glu	Asp	Val		110	115	120
Ile	Arg	His	Gly	Ala	Asp	Ala	Val	Arg	Gly	Ser	Trp	Gln	Gly	Val		125	130	135
Pro	Gly	His	Ser	Gly	Ala	Trp	Glu	Thr	Ser	Gly	Gly	His	Gly	Ile		140	145	150
Phe	Gly	Ser	Gln	Gly	Gly	Leu	Gly	Gly	Gln	Gly	Gln	Gly	Asn	Pro		155	160	165
Gly	Gly	Leu	Gly	Thr	Pro	Trp	Val	His	Gly	Tyr	Pro	Gly	Asn	Ser		170	175	180
Ala	Gly	Ser	Phe	Gly	Met	Asn	Pro	Gln	Gly	Ala	Pro	Trp	Gly	Gln		185	190	195
Gly	Gly	Asn	Gly	Gly	Pro	Pro	Asn	Phe	Gly	Thr	Asn	Thr	Gln	Gly		200	205	210
Ala	Val	Ala	Gln	Pro	Gly	Tyr	Gly	Ser	Val	Arg	Ala	Ser	Asn	Gln		215	220	225
Asn	Glu	Gly	Cys	Thr	Asn	Pro	Pro	Pro	Ser	Gly	Ser	Gly	Gly	Gly		230	235	240
Ser	Ser	Asn	Ser	Gly	Gly	Gly	Ser	Gly	Ser	Gln	Ser	Gly	Ser	Ser		245	250	255
Gly	Ser	Gly	Ser	Asn	Gly	Asp	Asn	Asn	Asn	Gly	Ser	Ser	Ser	Gly		260	265	270
Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Gly	Gly	Ser		275	280	285
Ser	Gly	Gly	Ser	Ser	Gly	Gly	Ser	Ser	Gly	Asn	Ser	Gly	Gly	Ser		290	295	300
Arg	Gly	Asp	Ser	Gly	Ser	Glu	Ser	Ser	Trp	Gly	Ser	Ser	Thr	Gly		305	310	315
Ser	Ser	Ser	Gly	Asn	His	Gly	Gly	Ser	Gly	Gly	Gly	Asn	Gly	His		320	325	330
Lys	Pro	Gly	Cys	Glu	Lys	Pro	Gly	Asn	Glu	Ala	Arg	Gly	Ser	Gly		335	340	345
Glu	Ser	Gly	Ile	Gln	Gly	Phe	Arg	Gly	Gln	Gly	Val	Ser	Ser	Asn		350	355	360
Met	Arg	Glu	Ile	Ser	Lys	Glu	Gly	Asn	Arg	Leu	Leu	Gly	Gly	Ser		365	370	375

Gly	Asp	Asn	Tyr	Arg	Gly	Gln	Gly	Ser	Ser	Trp	Gly	Ser	Gly	Gly
				380					385					390
Gly	Asp	Ala	Val	Gly	Gly	Val	Asn	Thr	Val	Asn	Ser	Glu	Thr	Ser
				395					400					405
Pro	Gly	Met	Phe	Asn	Phe	Asp	Thr	Phe	Trp	Lys	Asn	Phe	Lys	Ser
				410					415					420
Lys	Leu	Gly	Phe	Ile	Asn	Trp	Asp	Ala	Ile	Asn	Lys	Asp	Gln	Arg
				425					430					435
Ser	Ser	Arg	Ile	Pro										
				440										

<210> 53
 <211> 1676
 <212> DNA
 <213> Homo Sapien

<400> 53
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 actcctgctg ctggttgtgg gctcctggct actcgccgc atcctggctt 150
 ggacctatgc cttctataac aactgccgcc ggctccagtg tttccacag 200
 cccccaaac ggaactggtt ttggggtcac ctgggcctga tcactcctac 250
 agaggagggc ttgaaggact cgaccagat gtcggccacc tattccagg 300
 gctttacggt atggctgggt cccatcatcc ccttcacgt tttatgccac 350
 cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcaccaa 400
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 tctcctgggt cctgtacaac cttgcgaggc acccagaata ccaggagcgc 1100
 tgccgacagg aggtgcaaga gcttctgaag gaccgcatc ctaaagagat 1150
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 agagcctgag gttacatccc ccagctccct tcattctccg atgctgcacc 1250
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 ttgatcatgc gcgccgaggg cgggctttgg ctgcgggtgg agcccctgaa 1600
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<210> 54

<211> 524

<212> PRT

<213> Homo Sapien

<400> 54

Met	Ser	Leu	Leu	Ser	Leu	Pro	Trp	Leu	Gly	Leu	Arg	Pro	Val	Ala
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Met	Ser	Pro	Trp	Leu	Leu	Leu	Leu	Leu	Val	Val	Gly	Ser	Trp	Leu
				20					25					30
Leu	Ala	Arg	Ile	Leu	Ala	Trp	Thr	Tyr	Ala	Phe	Tyr	Asn	Asn	Cys
				35					40					45
Arg	Arg	Leu	Gln	Cys	Phe	Pro	Gln	Pro	Pro	Lys	Arg	Asn	Trp	Phe
				50					55					60
Trp	Gly	His	Leu	Gly	Leu	Ile	Thr	Pro	Thr	Glu	Glu	Gly	Leu	Lys
				65					70					75
Asp	Ser	Thr	Gln	Met	Ser	Ala	Thr	Tyr	Ser	Gln	Gly	Phe	Thr	Val
				80					85					90
Trp	Leu	Gly	Pro	Ile	Ile	Pro	Phe	Ile	Val	Leu	Cys	His	Pro	Asp
				95					100					105

Thr	Ile	Arg	Ser	Ile	Thr	Asn	Ala	Ser	Ala	Ala	Ile	Ala	Pro	Lys	
				110					115					120	
Asp	Asn	Leu	Phe	Ile	Arg	Phe	Leu	Lys	Pro	Trp	Leu	Gly	Glu	Gly	
				125					130					135	
Ile	Leu	Leu	Ser	Gly	Gly	Asp	Lys	Trp	Ser	Arg	His	Arg	Arg	Met	
				140					145					150	
Leu	Thr	Pro	Ala	Phe	His	Phe	Asn	Ile	Leu	Lys	Ser	Tyr	Ile	Thr	
				155					160					165	
Ile	Phe	Asn	Lys	Ser	Ala	Asn	Ile	Met	Leu	Asp	Lys	Trp	Gln	His	
				170					175					180	
Leu	Ala	Ser	Glu	Gly	Ser	Ser	Arg	Leu	Asp	Met	Phe	Glu	His	Ile	
				185					190					195	
Ser	Leu	Met	Thr	Leu	Asp	Ser	Leu	Gln	Lys	Cys	Ile	Phe	Ser	Phe	
				200					205					210	
Asp	Ser	His	Cys	Gln	Glu	Arg	Pro	Ser	Glu	Tyr	Ile	Ala	Thr	Ile	
				215					220					225	
Leu	Glu	Leu	Ser	Ala	Leu	Val	Glu	Lys	Arg	Ser	Gln	His	Ile	Leu	
				230					235					240	
Gln	His	Met	Asp	Phe	Leu	Tyr	Tyr	Leu	Ser	His	Asp	Gly	Arg	Arg	
				245					250					255	
Phe	His	Arg	Ala	Cys	Arg	Leu	Val	His	Asp	Phe	Thr	Asp	Ala	Val	
				260					265					270	
Ile	Arg	Glu	Arg	Arg	Arg	Thr	Leu	Pro	Thr	Gln	Gly	Ile	Asp	Asp	
				275					280					285	
Phe	Phe	Lys	Asp	Lys	Ala	Lys	Ser	Lys	Thr	Leu	Asp	Phe	Ile	Asp	
				290					295					300	
Val	Leu	Leu	Leu	Ser	Lys	Asp	Glu	Asp	Gly	Lys	Ala	Leu	Ser	Asp	
				305					310					315	
Glu	Asp	Ile	Arg	Ala	Glu	Ala	Asp	Thr	Phe	Met	Phe	Gly	Gly	His	
				320					325					330	
Asp	Thr	Thr	Ala	Ser	Gly	Leu	Ser	Trp	Val	Leu	Tyr	Asn	Leu	Ala	
				335					340					345	
Arg	His	Pro	Glu	Tyr	Gln	Glu	Arg	Cys	Arg	Gln	Glu	Val	Gln	Glu	
				350					355					360	
Leu	Leu	Lys	Asp	Arg	Asp	Pro	Lys	Glu	Ile	Glu	Trp	Asp	Asp	Leu	
				365					370					375	
Ala	Gln	Leu	Pro	Phe	Leu	Thr	Met	Cys	Val	Lys	Glu	Ser	Leu	Arg	
				380					385					390	

Leu	His	Pro	Pro	Ala	Pro	Phe	Ile	Ser	Arg	Cys	Cys	Thr	Gln	Asp	
				395					400					405	
Ile	Val	Leu	Pro	Asp	Gly	Arg	Val	Ile	Pro	Lys	Gly	Ile	Thr	Cys	
				410					415					420	
Leu	Ile	Asp	Ile	Ile	Gly	Val	His	His	Asn	Pro	Thr	Val	Trp	Pro	
				425					430					435	
Asp	Pro	Glu	Val	Tyr	Asp	Pro	Phe	Arg	Phe	Asp	Pro	Glu	Asn	Ser	
				440					445					450	
Lys	Gly	Arg	Ser	Pro	Leu	Ala	Phe	Ile	Pro	Phe	Ser	Ala	Gly	Pro	
				455					460					465	
Arg	Asn	Cys	Ile	Gly	Gln	Ala	Phe	Ala	Met	Ala	Glu	Met	Lys	Val	
				470					475					480	
Val	Leu	Ala	Leu	Met	Leu	Leu	His	Phe	Arg	Phe	Leu	Pro	Asp	His	
				485					490					495	
Thr	Glu	Pro	Arg	Arg	Lys	Leu	Glu	Leu	Ile	Met	Arg	Ala	Glu	Gly	
				500					505					510	
Gly	Leu	Trp	Leu	Arg	Val	Glu	Pro	Leu	Asn	Val	Gly	Leu	Gln		
				515					520						

<210> 55
 <211> 644
 <212> DNA
 <213> Homo Sapien

<400> 55
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 tgtgttttgc acttaccttg tgttctgcct tttggtggca taacaaggga 150
 cttgcactta tcttctgcat tttgcagtct ttggcattga cgtggtacag 200
 cctttccttc ataccatttg caagggatgc tgtgaagaag tgttttgccg 250
 tgtgtccttg ataattcatg gccagtttta tgaagctttg gaaggcacta 300
 tggacagaag ctggtggaca gttttgtaac tatcttcgaa acctctgtct 350
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 catttgaggg ttacttttgg aagcaacaat acattctcga acctgaatgt 450
 cagtagcaca ggatgagaag tgggttctgt atcttgtgga gtggaatctt 500
 cctcatgtac ctgtttcctc tctggatgtt gtccactga attcccatga 550
 atacaaacct attcagcaac agcaaaaaaa aaaaaaaaaa aaaaaaaaaa 600

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 644

<210> 56

<211> 77

<212> PRT

<213> Homo Sapien

<400> 56

Met Gly Pro Val Lys Gln Leu Lys Arg Met Phe Glu Pro Thr Arg
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Leu Ile Ala Thr Ile Met Val Leu Leu Cys Phe Ala Leu Thr Leu
20 25 30

Cys Ser Ala Phe Trp Trp His Asn Lys Gly Leu Ala Leu Ile Phe
35 40 45

Cys Ile Leu Gln Ser Leu Ala Leu Thr Trp Tyr Ser Leu Ser Phe
50 55 60

Ile Pro Phe Ala Arg Asp Ala Val Lys Lys Cys Phe Ala Val Cys
65 70 75

Leu Ala

<210> 57

<211> 3334

<212> DNA

<213> Homo Sapien

<400> 57

cggctcgagc tcgagccgaa tcggctcgag gggcagtgga gcacccagca 50

ggccgccaac atgctctgtc tgtgcctgta cgtgccggtc atcggggaag 100

cccagaccga gttccagtac tttgagtcga aggggctccc tgccgagctg 150

aagtccattt tcaagctcag tgtcttcac cctcccagg aattctccac 200

ctaccgccag tggaagcaga aaattgtaca agctggagat aaggaccttg 250

atgggcagct agactttgaa gaatttgtcc attatctcca agatcatgag 300

aagaagctga ggctggtggt taagattttg gacaaaaaga atgatggacg 350

cattgacgcg caggagatca tgcagtcctt gcgggacttg ggagtcaaga 400

tatctgaaca gcaggcagaa aaaatttctca agagcatgga taaaaacggc 450

acgatgacca tcgactggaa cgagtggaga gactaccacc tcctccaccc 500

cgtggaaaac atccccgaga tcatcctcta ctggaagcat tccacgatct 550

ttgatgtggg tgagaatcta acgggtcccg atgagttcac agtggaggag 600

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 3334

<210> 58

<211> 469

<212> PRT

<213> Homo Sapien

<400> 58

Met Leu Cys Leu Cys Leu Tyr Val Pro Val Ile Gly Glu Ala Gln

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Thr Glu Phe Gln Tyr	Phe Glu Ser Lys	Gly Leu Pro Ala Glu Leu	
20		25	30
Lys Ser Ile Phe Lys	Leu Ser Val Phe	Ile Pro Ser Gln Glu Phe	
35		40	45
Ser Thr Tyr Arg Gln	Trp Lys Gln Lys	Ile Val Gln Ala Gly Asp	
50		55	60
Lys Asp Leu Asp Gly	Gln Leu Asp Phe	Glu Glu Phe Val His Tyr	
65		70	75
Leu Gln Asp His Glu	Lys Lys Leu Arg	Leu Val Phe Lys Ile Leu	
80		85	90
Asp Lys Lys Asn Asp	Gly Arg Ile Asp	Ala Gln Glu Ile Met Gln	
95		100	105
Ser Leu Arg Asp Leu	Gly Val Lys Ile	Ser Glu Gln Gln Ala Glu	
110		115	120
Lys Ile Leu Lys Ser	Met Asp Lys Asn	Gly Thr Met Thr Ile Asp	
125		130	135
Trp Asn Glu Trp Arg	Asp Tyr His Leu	Leu His Pro Val Glu Asn	
140		145	150
Ile Pro Glu Ile Ile	Leu Tyr Trp Lys	His Ser Thr Ile Phe Asp	
155		160	165
Val Gly Glu Asn Leu	Thr Val Pro Asp	Glu Phe Thr Val Glu Glu	
170		175	180
Arg Gln Thr Gly Met	Trp Trp Arg His	Leu Val Ala Gly Gly Gly	
185		190	195
Ala Gly Ala Val Ser	Arg Thr Cys Thr	Ala Pro Leu Asp Arg Leu	
200		205	210
Lys Val Leu Met Gln	Val His Ala Ser	Arg Ser Asn Asn Met Gly	
215		220	225
Ile Val Gly Gly Phe	Thr Gln Met Ile	Arg Glu Gly Gly Ala Arg	
230		235	240
Ser Leu Trp Arg Gly	Asn Gly Ile Asn	Val Leu Lys Ile Ala Pro	
245		250	255
Glu Ser Ala Ile Lys	Phe Met Ala Tyr	Glu Gln Ile Lys Arg Leu	
260		265	270
Val Gly Ser Asp Gln	Glu Thr Leu Arg	Ile His Glu Arg Leu Val	
275		280	285
Ala Gly Ser Leu Ala	Gly Ala Ile Ala	Gln Ser Ser Ile Tyr Pro	

290					295					300				
Met	Glu	Val	Leu	Lys	Thr	Arg	Met	Ala	Leu	Arg	Lys	Thr	Gly	Gln
				305					310					315
Tyr	Ser	Gly	Met	Leu	Asp	Cys	Ala	Arg	Arg	Ile	Leu	Ala	Arg	Glu
				320					325					330
Gly	Val	Ala	Ala	Phe	Tyr	Lys	Gly	Tyr	Val	Pro	Asn	Met	Leu	Gly
				335					340					345
Ile	Ile	Pro	Tyr	Ala	Gly	Ile	Asp	Leu	Ala	Val	Tyr	Glu	Thr	Leu
				350					355					360
Lys	Asn	Ala	Trp	Leu	Gln	His	Tyr	Ala	Val	Asn	Ser	Ala	Asp	Pro
				365					370					375
Gly	Val	Phe	Val	Leu	Leu	Ala	Cys	Gly	Thr	Met	Ser	Ser	Thr	Cys
				380					385					390
Gly	Gln	Leu	Ala	Ser	Tyr	Pro	Leu	Ala	Leu	Val	Arg	Thr	Arg	Met
				395					400					405
Gln	Ala	Gln	Ala	Ser	Ile	Glu	Gly	Ala	Pro	Glu	Val	Thr	Met	Ser
				410					415					420
Ser	Leu	Phe	Lys	His	Ile	Leu	Arg	Thr	Glu	Gly	Ala	Phe	Gly	Leu
				425					430					435
Tyr	Arg	Gly	Leu	Ala	Pro	Asn	Phe	Met	Lys	Val	Ile	Pro	Ala	Val
				440					445					450
Ser	Ile	Ser	Tyr	Val	Val	Tyr	Glu	Asn	Leu	Lys	Ile	Thr	Leu	Gly
				455					460					465

Val Gln Ser Arg

<210> 59
 <211> 1658
 <212> DNA
 <213> Homo Sapien

<400> 59
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 gcatcatcat tattctggct ggagcaattg cactcatcat tggctttggt 150
 atttcagga gacactccat cacagtcact actgtcgcct cagctgggaa 200
 cattggggag gatggaatcc tgagctgcac ttttgaacct gacatcaaac 250
 tttctgatat cgtgatacaa tggctgaagg aaggtgtttt aggcttggtc 300
 catgagttca aagaaggcaa agatgagctg tcggagcagg atgaaatgtt 350

cagaggccgg acagcagtgt ttgctgatca agtgatagtt ggcaatgcct 400
ctttgcggct gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450
tatatcatca cttctaaagg caaggggaat gctaaccttg agtataaaac 500
tggagccttc agcatgccgg aagtgaatgt ggactataat gccagctcag 550
agaccttgcg gtgtgaggct ccccgatggt tccccagcc cacagtggtc 600
tgggcatccc aagttgacca gggagccaac ttctcggaag tctccaatac 650
cagctttgag ctgaactctg agaatgtgac catgaagggt gtgtctgtgc 700
tctacaatgt tacgatcaac aacacatact cctgtatgat tgaaaatgac 750
attgccaaag caacagggga tatcaaagt acagaatcgg agatcaaaag 800
gcggagtcac ctacagctgc taaactcaaa ggcttctctg tgtgtctctt 850
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acagggatct acagaactat ttcaccacca gatatgacct agttttatat 1000
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agcaagaaac aaaaagaagc caaaagcaga aggctccaat atgaacaaga 1100
taaattctatc ttcaaagaca tattagaagt tgggaaaata attcatgtga 1150
actagacaag tgtgttaaga gtgataagta aaatgcacgt ggagacaagt 1200
gcatccccag atctcaggga cctccccctg cctgtcacct ggggagttag 1250
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aattgactgc cacttcgcaa ctgagggcg gctgcatttt agtaatgggt 1450
caaatgattc actttttatg atgcttccaa aggtgccttg gcttctcttc 1500
ccaactgaca aatgccaaag ttgagaaaaa tgatcataat tttagcataa 1550
acagagcagt cggggacacc gattttataa ataaactgag caccttcttt 1600
ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaa 1658

<210> 60
<211> 282

<212> PRT

<213> Homo Sapien

<400> 60

Met	Ala	Ser	Leu	Gly	Gln	Ile	Leu	Phe	Trp	Ser	Ile	Ile	Ser	Ile	
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				20					25					30	
Ile	Ser	Gly	Arg	His	Ser	Ile	Thr	Val	Thr	Thr	Val	Ala	Ser	Ala	
				35					40					45	
Gly	Asn	Ile	Gly	Glu	Asp	Gly	Ile	Leu	Ser	Cys	Thr	Phe	Glu	Pro	
				50					55					60	
Asp	Ile	Lys	Leu	Ser	Asp	Ile	Val	Ile	Gln	Trp	Leu	Lys	Glu	Gly	
				65					70					75	
Val	Leu	Gly	Leu	Val	His	Glu	Phe	Lys	Glu	Gly	Lys	Asp	Glu	Leu	
				80					85					90	
Ser	Glu	Gln	Asp	Glu	Met	Phe	Arg	Gly	Arg	Thr	Ala	Val	Phe	Ala	
				95					100					105	
Asp	Gln	Val	Ile	Val	Gly	Asn	Ala	Ser	Leu	Arg	Leu	Lys	Asn	Val	
				110					115					120	
Gln	Leu	Thr	Asp	Ala	Gly	Thr	Tyr	Lys	Cys	Tyr	Ile	Ile	Thr	Ser	
				125					130					135	
Lys	Gly	Lys	Gly	Asn	Ala	Asn	Leu	Glu	Tyr	Lys	Thr	Gly	Ala	Phe	
				140					145					150	
Ser	Met	Pro	Glu	Val	Asn	Val	Asp	Tyr	Asn	Ala	Ser	Ser	Glu	Thr	
				155					160					165	
Leu	Arg	Cys	Glu	Ala	Pro	Arg	Trp	Phe	Pro	Gln	Pro	Thr	Val	Val	
				170					175					180	
Trp	Ala	Ser	Gln	Val	Asp	Gln	Gly	Ala	Asn	Phe	Ser	Glu	Val	Ser	
				185					190					195	
Asn	Thr	Ser	Phe	Glu	Leu	Asn	Ser	Glu	Asn	Val	Thr	Met	Lys	Val	
				200					205					210	
Val	Ser	Val	Leu	Tyr	Asn	Val	Thr	Ile	Asn	Asn	Thr	Tyr	Ser	Cys	
				215					220					225	
Met	Ile	Glu	Asn	Asp	Ile	Ala	Lys	Ala	Thr	Gly	Asp	Ile	Lys	Val	
				230					235					240	
Thr	Glu	Ser	Glu	Ile	Lys	Arg	Arg	Ser	His	Leu	Gln	Leu	Leu	Asn	
				245					250					255	
Ser	Lys	Ala	Ser	Leu	Cys	Val	Ser	Ser	Phe	Phe	Ala	Ile	Ser	Trp	
				260					265					270	

Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
 275 280

<210> 61
 <211> 1617
 <212> DNA
 <213> Homo Sapien

<400> 61
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 ccccccaata gtggagggca gtatggtagt gggctacccc ctggtggtgg 150
 ttatgggggt cctgcccctg gagggcctta tggaccacca gctggtggag 200
 ggccctatgg acacccaat cctgggatgt tcccctctgg aactccagga 250
 ggaccatatg gcggtgcagc tcccgggggc ccctatggtc agccacctcc 300
 aagttcctac ggtgcccagc agcctgggct ttatggacag ggtggcgccc 350
 ctcccaatgt ggatcctgag gcctactcct ggttccagtc ggtggactca 400
 gatcacagtg gctatatctc catgaaggag ctaaagcagg ccctgggtcaa 450
 ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500
 tgtttgacaa gaccaagtca ggccgcacgc atgtctacgg cttctcagcc 550
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 ggaccgctcg ggctccatta gctacacaga gctgcagcaa gctctgtccc 650
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 cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcaccatg 850
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 cagggacctt tcttggttct ttagagtgag agaagtatgt ggacatctct 950
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 gttgaatgtc ctgatggcca tgagcagttg agtggcacag cctggcacca 1150
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 gccacaccca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400
 cctgctcaga caaatctgct ccctgggcat ctttggccag gcttctgccc 1450
 cctgcagctg ggaccctca cttgctgcc atgctctgct cggcttcagt 1500
 ctccaggaga cagtggtcac ctctccctgc caatactttt ttttaattgc 1550
 attttttttc atttggggcc aaaagtccag tgaaattgta agcttcaata 1600
 aaaggatgaa actctga 1617

<210> 62
 <211> 284
 <212> PRT
 <213> Homo Sapien

<400> 62
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 Gln Ala Pro Gly Ala Pro Pro Gly Ser Tyr Tyr Pro Gly Pro Pro
 20 25 30
 Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly
 35 40 45
 Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly
 50 55 60
 Gly Gly Pro Tyr Gly His Pro Asn Pro Gly Met Phe Pro Ser Gly
 65 70 75
 Thr Pro Gly Gly Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr
 80 85 90
 Gly Gln Pro Pro Pro Ser Ser Tyr Gly Ala Gln Gln Pro Gly Leu
 95 100 105
 Tyr Gly Gln Gly Gly Ala Pro Pro Asn Val Asp Pro Glu Ala Tyr
 110 115 120
 Ser Trp Phe Gln Ser Val Asp Ser Asp His Ser Gly Tyr Ile Ser
 125 130 135
 Met Lys Glu Leu Lys Gln Ala Leu Val Asn Cys Asn Trp Ser Ser
 140 145 150
 Phe Asn Asp Glu Thr Cys Leu Met Met Ile Asn Met Phe Asp Lys
 155 160 165

Thr	Lys	Ser	Gly	Arg	Ile	Asp	Val	Tyr	Gly	Phe	Ser	Ala	Leu	Trp
				170					175					180
Lys	Phe	Ile	Gln	Gln	Trp	Lys	Asn	Leu	Phe	Gln	Gln	Tyr	Asp	Arg
				185					190					195
Asp	Arg	Ser	Gly	Ser	Ile	Ser	Tyr	Thr	Glu	Leu	Gln	Gln	Ala	Leu
				200					205					210
Ser	Gln	Met	Gly	Tyr	Asn	Leu	Ser	Pro	Gln	Phe	Thr	Gln	Leu	Leu
				215					220					225
Val	Ser	Arg	Tyr	Cys	Pro	Arg	Ser	Ala	Asn	Pro	Ala	Met	Gln	Leu
				230					235					240
Asp	Arg	Phe	Ile	Gln	Val	Cys	Thr	Gln	Leu	Gln	Val	Leu	Thr	Glu
				245					250					255
Ala	Phe	Arg	Glu	Lys	Asp	Thr	Ala	Val	Gln	Gly	Asn	Ile	Arg	Leu
				260					265					270
Ser	Phe	Glu	Asp	Phe	Val	Thr	Met	Thr	Ala	Ser	Arg	Met	Leu	
				275					280					

<210> 63
 <211> 1234
 <212> DNA
 <213> Homo Sapien

<400> 63
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 gaggagaaag tttcccaaaa cttcgggacc aacttgctc agctcggaca 150

 accttctcc actggcccct ctaactctga acatccgcag cccgctctgg 200
 accctaggtc taatgacttg gcaagggttc ctctgaagct cagcgtgcct 250

 ccatcagatg gcttccacc tgcaggaggt tctgcagtgc agaggtggcc 300
 tccatcgtgg gggctgcctg ccatggattc ctggccccct gaggatcctt 350
 ggcagatgat ggctgctgcg gctgaggacc gcctggggga agcgctgcct 400
 gaagaactct cttacctctc cagtgtgcg gccctcgctc cgggcagtgg 450
 ccctttgcct ggggagtctt ctcccgatgc cacaggcctc tcacctgagg 500
 cttcactcct ccaccaggac tcggagtcca gacgactgcc ccgttctaata 550
 tcaactggag cggggggaaa aatcctttcc caacgccctc cctgggtctct 600
 catccacagg gttctgcctg atcaccctg gggtaccctg aatcccagtg 650
 tgtcctgggg aggtggaggc cctgggactg gttggggaac gaggcccatg 700

ccacaccctg agggaaatctg gggatatcaat aatcaacccc caggtaccag 750
 ctgggggaaat attaatcggg atccaggagg cagctgggga aatattaatc 800
 ggtatccagg aggcagctgg gggaatatta atcggtatcc aggaggcagc 850
 tgggggaata ttcattctata cccaggtatc aataacccat ttcctcctgg 900
 agttctccgc cctcctgggt cttcttgga catcccagct ggcttcctta 950
 atcctccaag ccctaggttg cagtgggggt agagcacgat agagggaaac 1000
 ccaacattgg gagttagagt cctgctcccg ccccttgctg tgtggggtca 1050
 atccaggccc tgtaacatg tttccagcac tatccccact tttcagtgcc 1100
 tcccctgctc atctccaata aaataaaaagc acttatgaaa aaaaaaaaaa 1150
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 64
 <211> 325
 <212> PRT
 <213> Homo Sapien

<400> 64
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 Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly
 20 25 30
 Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro
 35 40 45
 Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His
 50 55 60
 Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val
 65 70 75
 Pro Leu Lys Leu Ser Val Pro Pro Ser Asp Gly Phe Pro Pro Ala
 80 85 90
 Gly Gly Ser Ala Val Gln Arg Trp Pro Pro Ser Trp Gly Leu Pro
 95 100 105
 Ala Met Asp Ser Trp Pro Pro Glu Asp Pro Trp Gln Met Met Ala
 110 115 120
 Ala Ala Ala Glu Asp Arg Leu Gly Glu Ala Leu Pro Glu Glu Leu
 125 130 135
 Ser Tyr Leu Ser Ser Ala Ala Ala Leu Ala Pro Gly Ser Gly Pro
 140 145 150

Leu	Pro	Gly	Glu	Ser	Ser	Pro	Asp	Ala	Thr	Gly	Leu	Ser	Pro	Glu	155	160	165
Ala	Ser	Leu	Leu	His	Gln	Asp	Ser	Glu	Ser	Arg	Arg	Leu	Pro	Arg	170	175	180
Ser	Asn	Ser	Leu	Gly	Ala	Gly	Gly	Lys	Ile	Leu	Ser	Gln	Arg	Pro	185	190	195
Pro	Trp	Ser	Leu	Ile	His	Arg	Val	Leu	Pro	Asp	His	Pro	Trp	Gly	200	205	210
Thr	Leu	Asn	Pro	Ser	Val	Ser	Trp	Gly	Gly	Gly	Gly	Pro	Gly	Thr	215	220	225
Gly	Trp	Gly	Thr	Arg	Pro	Met	Pro	His	Pro	Glu	Gly	Ile	Trp	Gly	230	235	240
Ile	Asn	Asn	Gln	Pro	Pro	Gly	Thr	Ser	Trp	Gly	Asn	Ile	Asn	Arg	245	250	255
Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	260	265	270
Ser	Trp	Gly	Asn	Ile	Asn	Arg	Tyr	Pro	Gly	Gly	Ser	Trp	Gly	Asn	275	280	285
Ile	His	Leu	Tyr	Pro	Gly	Ile	Asn	Asn	Pro	Phe	Pro	Pro	Gly	Val	290	295	300
Leu	Arg	Pro	Pro	Gly	Ser	Ser	Trp	Asn	Ile	Pro	Ala	Gly	Phe	Pro	305	310	315
Asn	Pro	Pro	Ser	Pro	Arg	Leu	Gln	Trp	Gly						320	325	

<210> 65
 <211> 422
 <212> DNA
 <213> Homo Sapien

<400> 65
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 gcagctcaca tggaacaggg ccgggtatga ctttgcaact gaagctgaag 150
 gagtcttttc tgacaaattc ctctatgag tccagcttcc tggaattgct 200
 tgaaaagctc tgccctctcc tccatctccc ttcagggacc agcgtcaccc 250
 tccaccatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
 ttgaagcctg tgtccttctt ggcccgggct tttgggccgg ggatgcagga 350
 ggcaggcccc gaccctgtct ttcagcaggc cccaccctc ctgagtggca 400

ataaataaaa ttcggtatgc tg 422

<210> 66

<211> 78

<212> PRT

<213> Homo Sapien

<400> 66

Met	Gly	Ser	Gly	Leu	Pro	Leu	Val	Leu	Leu	Leu	Thr	Leu	Leu	Gly
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Ser	Ser	His	Gly	Thr	Gly	Pro	Gly	Met	Thr	Leu	Gln	Leu	Lys	Leu
				20				25						30
Lys	Glu	Ser	Phe	Leu	Thr	Asn	Ser	Ser	Tyr	Glu	Ser	Ser	Phe	Leu
				35				40						45
Glu	Leu	Leu	Glu	Lys	Leu	Cys	Leu	Leu	Leu	His	Leu	Pro	Ser	Gly
				50				55						60
Thr	Ser	Val	Thr	Leu	His	His	Ala	Arg	Ser	Gln	His	His	Val	Val
				65				70						75

Cys Asn Thr

<210> 67

<211> 744

<212> DNA

<213> Homo Sapien

<400> 67

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gccaccacgc ccatggcgaa ccccgggctg gggctgcttc tggcgctggg 200

cctgccgttc ctgctggccc gctggggccg agcctggggg caaatacaga 250

ccatttctgc aaatgagaat agcactgttt tgccttcac caccagctcc 300

agctccgatg gcaacctgcg tccggaagcc atcactgcta tcatcgtggg 350

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tgcggaagct tcgggagaag cggcagacgg agggcaccta ccggcccagt 450

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caaggagacg gtgcagggct gcctgcccac ctaggtcccc tctcctgcat 550

ctgtctccct tcattgctgt gtgaccttgg ggaaaggcag tgccctctct 600

gggcagtcag atccaccacg tgcttaatag cagggaagaa ggtacttcaa 650

agactctgcc cctgaggtca agagaggatg gggctattca cttttatata 700

tttatataaa attagtagtg agatgtaaaa aaaaaaaaaa aaaa 744

<210> 68

<211> 123

<212> PRT

<213> Homo Sapien

<400> 68

Met	Ala	Asn	Pro	Gly	Leu	Gly	Leu	Leu	Ala	Leu	Gly	Leu	Pro
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Phe	Leu	Leu	Ala	Arg	Trp	Gly	Arg	Ala	Trp	Gly	Gln	Ile	Gln	Thr
				20				25						30

Thr	Ser	Ala	Asn	Glu	Asn	Ser	Thr	Val	Leu	Pro	Ser	Ser	Thr	Ser
				35				40						45

Ser	Ser	Ser	Asp	Gly	Asn	Leu	Arg	Pro	Glu	Ala	Ile	Thr	Ala	Ile
				50				55						60

Ile	Val	Val	Phe	Ser	Leu	Leu	Ala	Ala	Leu	Leu	Leu	Ala	Val	Gly
				65				70						75

Leu	Ala	Leu	Leu	Val	Arg	Lys	Leu	Arg	Glu	Lys	Arg	Gln	Thr	Glu
				80				85						90

Gly	Thr	Tyr	Arg	Pro	Ser	Ser	Glu	Glu	Gln	Phe	Ser	His	Ala	Ala
				95				100						105

Glu	Ala	Arg	Ala	Pro	Gln	Asp	Ser	Lys	Glu	Thr	Val	Gln	Gly	Cys
				110				115						120

Leu Pro Ile

<210> 69

<211> 3265

<212> DNA

<213> Homo Sapien

<400> 69

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cctcttagtt ctgtgcctgc tgcaccagtc aaatacttcc ttcattaagc 100

tgaataataa tggctttgaa gatattgtca ttgttataga tcctagtgtg 150

ccagaagatg aaaaaataat tgaacaaata gaggatatgg tgactacagc 200

ttctacgtac ctgtttgaag ccacagaaaa aagatttttt ttcaaaaatg 250

tatctatatt aattcctgag aattggaagg aaaatcctca gtacaaaagg 300

ccaaaacatg aaaaccataa acatgctgat gttatagttg caccacctac 350

actcccaggt agagatgaac catacaccaa gcagttcaca gaatgtggag 400
 agaaaggcga atacattcac ttcaccctg accttctact tggaaaaaaa 450
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 gtgctaagtc aaaaaaaatc gaagcaacaa ggtgttccgc aggtatctct 600
 ggtagaaata gagtttataa gtgtcaagga ggcagctgtc ttagtagagc 650
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 tgtttcagat gaagctcaga acaatggcct cattgatgct tttggggctc 1450
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 cccaatgatt gtttacgcag aaattctaca aggatatgta cctgttcttg 1900
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 aatacaagta aaggagagca aataaacaac atttgaaaa aaaaaaaaaa 3200

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3250

aaaaaaaaaa aaaaaa 3265

<210> 70

<211> 919

<212> PRT

<213> Homo Sapien

<400> 70

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Leu	His	Gln	Ser	Asn	Thr	Ser	Phe	Ile	Lys	Leu	Asn	Asn	Asn	Gly
				20					25					30

Phe	Glu	Asp	Ile	Val	Ile	Val	Ile	Asp	Pro	Ser	Val	Pro	Glu	Asp
				35					40					45

Glu	Lys	Ile	Ile	Glu	Gln	Ile	Glu	Asp	Met	Val	Thr	Thr	Ala	Ser
				50					55					60

Thr	Tyr	Leu	Phe	Glu	Ala	Thr	Glu	Lys	Arg	Phe	Phe	Phe	Lys	Asn
				65					70					75

Val	Ser	Ile	Leu	Ile	Pro	Glu	Asn	Trp	Lys	Glu	Asn	Pro	Gln	Tyr
				80					85					90

Lys	Arg	Pro	Lys	His	Glu	Asn	His	Lys	His	Ala	Asp	Val	Ile	Val
				95					100					105

Ala	Pro	Pro	Thr	Leu	Pro	Gly	Arg	Asp	Glu	Pro	Tyr	Thr	Lys	Gln
				110					115					120

Phe	Thr	Glu	Cys	Gly	Glu	Lys	Gly	Glu	Tyr	Ile	His	Phe	Thr	Pro
				125					130					135

Asp	Leu	Leu	Leu	Gly	Lys	Lys	Gln	Asn	Glu	Tyr	Gly	Pro	Pro	Gly
				140					145					150

Lys	Leu	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe
				155					160					165

Asp	Glu	Tyr	Asn	Glu	Asp	Gln	Pro	Phe	Tyr	Arg	Ala	Lys	Ser	Lys
				170					175					180

Lys	Ile	Glu	Ala	Thr	Arg	Cys	Ser	Ala	Gly	Ile	Ser	Gly	Arg	Asn
				185					190					195

Arg	Val	Tyr	Lys	Cys	Gln	Gly	Gly	Ser	Cys	Leu	Ser	Arg	Ala	Cys
				200					205					210

Arg	Ile	Asp	Ser	Thr	Thr	Lys	Leu	Tyr	Gly	Lys	Asp	Cys	Gln	Phe
				215					220					225

Phe	Pro	Asp	Lys	Val	Gln	Thr	Glu	Lys	Ala	Ser	Ile	Met	Phe	Met
				230					235					240

Gln Ser Ile Asp	Ser Val Val Glu Phe	Cys Asn Glu Lys Thr His
245	250	255
Asn Gln Glu Ala	Pro Ser Leu Gln Asn Ile Lys Cys Asn Phe Arg	
260	265	270
Ser Thr Trp Glu	Val Ile Ser Asn Ser Glu Asp Phe Lys Asn Thr	
275	280	285
Ile Pro Met Val	Thr Pro Pro Pro Pro Pro Val Phe Ser Leu Leu	
290	295	300
Lys Ile Ser Gln	Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly	
305	310	315
Ser Met Gly Gly	Lys Asp Arg Leu Asn Arg Met Asn Gln Ala Ala	
320	325	330
Lys His Phe Leu	Leu Gln Thr Val Glu Asn Gly Ser Trp Val Gly	
335	340	345
Met Val His Phe	Asp Ser Thr Ala Thr Ile Val Asn Lys Leu Ile	
350	355	360
Gln Ile Lys Ser	Ser Asp Glu Arg Asn Thr Leu Met Ala Gly Leu	
365	370	375
Pro Thr Tyr Pro	Leu Gly Gly Thr Ser Ile Cys Ser Gly Ile Lys	
380	385	390
Tyr Ala Phe Gln	Val Ile Gly Glu Leu His Ser Gln Leu Asp Gly	
395	400	405
Ser Glu Val Leu	Leu Leu Thr Asp Gly Glu Asp Asn Thr Ala Ser	
410	415	420
Ser Cys Ile Asp	Glu Val Lys Gln Ser Gly Ala Ile Val His Phe	
425	430	435
Ile Ala Leu Gly	Arg Ala Ala Asp Glu Ala Val Ile Glu Met Ser	
440	445	450
Lys Ile Thr Gly	Gly Ser His Phe Tyr Val Ser Asp Glu Ala Gln	
455	460	465
Asn Asn Gly Leu	Ile Asp Ala Phe Gly Ala Leu Thr Ser Gly Asn	
470	475	480
Thr Asp Leu Ser	Gln Lys Ser Leu Gln Leu Glu Ser Lys Gly Leu	
485	490	495
Thr Leu Asn Ser	Asn Ala Trp Met Asn Asp Thr Val Ile Ile Asp	
500	505	510
Ser Thr Val Gly	Lys Asp Thr Phe Phe Leu Ile Thr Trp Asn Ser	
515	520	525

Leu	Pro	Pro	Ser	Ile	Ser	Leu	Trp	Asp	Pro	Ser	Gly	Thr	Ile	Met	530	535	540
Glu	Asn	Phe	Thr	Val	Asp	Ala	Thr	Ser	Lys	Met	Ala	Tyr	Leu	Ser	545	550	555
Ile	Pro	Gly	Thr	Ala	Lys	Val	Gly	Thr	Trp	Ala	Tyr	Asn	Leu	Gln	560	565	570
Ala	Lys	Ala	Asn	Pro	Glu	Thr	Leu	Thr	Ile	Thr	Val	Thr	Ser	Arg	575	580	585
Ala	Ala	Asn	Ser	Ser	Val	Pro	Pro	Ile	Thr	Val	Asn	Ala	Lys	Met	590	595	600
Asn	Lys	Asp	Val	Asn	Ser	Phe	Pro	Ser	Pro	Met	Ile	Val	Tyr	Ala	605	610	615
Glu	Ile	Leu	Gln	Gly	Tyr	Val	Pro	Val	Leu	Gly	Ala	Asn	Val	Thr	620	625	630
Ala	Phe	Ile	Glu	Ser	Gln	Asn	Gly	His	Thr	Glu	Val	Leu	Glu	Leu	635	640	645
Leu	Asp	Asn	Gly	Ala	Gly	Ala	Asp	Ser	Phe	Lys	Asn	Asp	Gly	Val	650	655	660
Tyr	Ser	Arg	Tyr	Phe	Thr	Ala	Tyr	Thr	Glu	Asn	Gly	Arg	Tyr	Ser	665	670	675
Leu	Lys	Val	Arg	Ala	His	Gly	Gly	Ala	Asn	Thr	Ala	Arg	Leu	Lys	680	685	690
Leu	Arg	Pro	Pro	Leu	Asn	Arg	Ala	Ala	Tyr	Ile	Pro	Gly	Trp	Val	695	700	705
Val	Asn	Gly	Glu	Ile	Glu	Ala	Asn	Pro	Pro	Arg	Pro	Glu	Ile	Asp	710	715	720
Glu	Asp	Thr	Gln	Thr	Thr	Leu	Glu	Asp	Phe	Ser	Arg	Thr	Ala	Ser	725	730	735
Gly	Gly	Ala	Phe	Val	Val	Ser	Gln	Val	Pro	Ser	Leu	Pro	Leu	Pro	740	745	750
Asp	Gln	Tyr	Pro	Pro	Ser	Gln	Ile	Thr	Asp	Leu	Asp	Ala	Thr	Val	755	760	765
His	Glu	Asp	Lys	Ile	Ile	Leu	Thr	Trp	Thr	Ala	Pro	Gly	Asp	Asn	770	775	780
Phe	Asp	Val	Gly	Lys	Val	Gln	Arg	Tyr	Ile	Ile	Arg	Ile	Ser	Ala	785	790	795
Ser	Ile	Leu	Asp	Leu	Arg	Asp	Ser	Phe	Asp	Asp	Ala	Leu	Gln	Val	800	805	810

Asn	Thr	Thr	Asp	Leu	Ser	Pro	Lys	Glu	Ala	Asn	Ser	Lys	Glu	Ser	
				815					820					825	
Phe	Ala	Phe	Lys	Pro	Glu	Asn	Ile	Ser	Glu	Glu	Asn	Ala	Thr	His	
				830					835					840	
Ile	Phe	Ile	Ala	Ile	Lys	Ser	Ile	Asp	Lys	Ser	Asn	Leu	Thr	Ser	
				845					850					855	
Lys	Val	Ser	Asn	Ile	Ala	Gln	Val	Thr	Leu	Phe	Ile	Pro	Gln	Ala	
				860					865					870	
Asn	Pro	Asp	Asp	Ile	Asp	Pro	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Pro	
				875					880					885	
Thr	Pro	Asp	Lys	Ser	His	Asn	Ser	Gly	Val	Asn	Ile	Ser	Thr	Leu	
				890					895					900	
Val	Leu	Ser	Val	Ile	Gly	Ser	Val	Val	Ile	Val	Asn	Phe	Ile	Leu	
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Ser Thr Thr Ile

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 <211> 3877
 <212> DNA
 <213> Homo Sapien

<400> 71
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<210> 72
 <211> 532
 <212> PRT
 <213> Homo Sapien

<400> 72
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 Val Val Leu Leu Val Leu Leu Cys Cys Ala Ile Ser Val Leu Tyr
 20 25 30
 Met Leu Ala Cys Thr Pro Lys Gly Asp Glu Glu Gln Leu Ala Leu
 35 40 45
 Pro Arg Ala Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val
 50 55 60
 Leu Gln Glu Trp Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu
 65 70 75
 Lys Arg Gln Ile Ala Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser
 80 85 90
 Glu Gln Leu Arg Asn Gly Gln Tyr Gln Ala Ser Asp Ala Ala Gly
 95 100 105
 Leu Gly Leu Asp Arg Ser Pro Pro Glu Lys Thr Gln Ala Asp Leu
 110 115 120
 Leu Ala Phe Leu His Ser Gln Val Asp Lys Ala Glu Val Asn Ala
 125 130 135
 Gly Val Lys Leu Ala Thr Glu Tyr Ala Ala Val Pro Phe Asp Ser
 140 145 150
 Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu Thr Gly Leu Thr Arg
 155 160 165
 His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys Arg Asp Glu Leu
 170 175 180
 Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn Asn Pro Ala

				185					190					195
Glu	Asn	Ser	Pro	Asn	His	Arg	Pro	Tyr	Thr	Ala	Ser	Asp	Phe	Ile
				200					205					210
Glu	Gly	Ile	Tyr	Arg	Thr	Glu	Arg	Asp	Lys	Gly	Thr	Leu	Tyr	Glu
				215					220					225
Leu	Thr	Phe	Lys	Gly	Asp	His	Lys	His	Glu	Phe	Lys	Arg	Leu	Ile
				230					235					240
Leu	Phe	Arg	Pro	Phe	Ser	Pro	Ile	Met	Lys	Val	Lys	Asn	Glu	Lys
				245					250					255
Leu	Asn	Met	Ala	Asn	Thr	Leu	Ile	Asn	Val	Ile	Val	Pro	Leu	Ala
				260					265					270
Lys	Arg	Val	Asp	Lys	Phe	Arg	Gln	Phe	Met	Gln	Asn	Phe	Arg	Glu
				275					280					285
Met	Cys	Ile	Glu	Gln	Asp	Gly	Arg	Val	His	Leu	Thr	Val	Val	Tyr
				290					295					300
Phe	Gly	Lys	Glu	Glu	Ile	Asn	Glu	Val	Lys	Gly	Ile	Leu	Glu	Asn
				305					310					315
Thr	Ser	Lys	Ala	Ala	Asn	Phe	Arg	Asn	Phe	Thr	Phe	Ile	Gln	Leu
				320					325					330
Asn	Gly	Glu	Phe	Ser	Arg	Gly	Lys	Gly	Leu	Asp	Val	Gly	Ala	Arg
				335					340					345
Phe	Trp	Lys	Gly	Ser	Asn	Val	Leu	Leu	Phe	Phe	Cys	Asp	Val	Asp
				350					355					360
Ile	Tyr	Phe	Thr	Ser	Glu	Phe	Leu	Asn	Thr	Cys	Arg	Leu	Asn	Thr
				365					370					375
Gln	Pro	Gly	Lys	Lys	Val	Phe	Tyr	Pro	Val	Leu	Phe	Ser	Gln	Tyr
				380					385					390
Asn	Pro	Gly	Ile	Ile	Tyr	Gly	His	His	Asp	Ala	Val	Pro	Pro	Leu
				395					400					405
Glu	Gln	Gln	Leu	Val	Ile	Lys	Lys	Glu	Thr	Gly	Phe	Trp	Arg	Asp
				410					415					420
Phe	Gly	Phe	Gly	Met	Thr	Cys	Gln	Tyr	Arg	Ser	Asp	Phe	Ile	Asn
				425					430					435
Ile	Gly	Gly	Phe	Asp	Leu	Asp	Ile	Lys	Gly	Trp	Gly	Gly	Glu	Asp
				440					445					450
Val	His	Leu	Tyr	Arg	Lys	Tyr	Leu	His	Ser	Asn	Leu	Ile	Val	Val
				455					460					465
Arg	Thr	Pro	Val	Arg	Gly	Leu	Phe	His	Leu	Trp	His	Glu	Lys	Arg

	470		475		480
Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln					
	485		490		495
Ser Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu					
	500		505		510
Val Phe Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln					
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Lys Thr Ser Ser Lys Lys Thr					
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 <211> 1701
 <212> DNA
 <213> Homo Sapien
 <220>
 <221> unsure
 <222> 1528
 <223> unknown base

<400> 73
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 gcaccccttc ctgggacact atgttggtct ccgccctcct gctggagggtg 300
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<210> 74

<211> 337

<212> PRT

<213> Homo Sapien

<400> 74

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Ala	Asp	Gly	Gly	Gln	His	Trp	Thr	Tyr	Glu	Gly	Pro	His	Gly	Gln
				20				25					30	
Asp	His	Trp	Pro	Ala	Ser	Tyr	Pro	Glu	Cys	Gly	Asn	Asn	Ala	Gln
				35				40					45	
Ser	Pro	Ile	Asp	Ile	Gln	Thr	Asp	Ser	Val	Thr	Phe	Asp	Pro	Asp
				50				55					60	
Leu	Pro	Ala	Leu	Gln	Pro	His	Gly	Tyr	Asp	Gln	Pro	Gly	Thr	Glu
				65				70					75	

Pro	Leu	Asp	Leu	His	Asn	Asn	Gly	His	Thr	Val	Gln	Leu	Ser	Leu		80	85	90
Pro	Ser	Thr	Leu	Tyr	Leu	Gly	Gly	Leu	Pro	Arg	Lys	Tyr	Val	Ala		95	100	105
Ala	Gln	Leu	His	Leu	His	Trp	Gly	Gln	Lys	Gly	Ser	Pro	Gly	Gly		110	115	120
Ser	Glu	His	Gln	Ile	Asn	Ser	Glu	Ala	Thr	Phe	Ala	Glu	Leu	His		125	130	135
Ile	Val	His	Tyr	Asp	Ser	Asp	Ser	Tyr	Asp	Ser	Leu	Ser	Glu	Ala		140	145	150
Ala	Glu	Arg	Pro	Gln	Gly	Leu	Ala	Val	Leu	Gly	Ile	Leu	Ile	Glu		155	160	165
Val	Gly	Glu	Thr	Lys	Asn	Ile	Ala	Tyr	Glu	His	Ile	Leu	Ser	His		170	175	180
Leu	His	Glu	Val	Arg	His	Lys	Asp	Gln	Lys	Thr	Ser	Val	Pro	Pro		185	190	195
Phe	Asn	Leu	Arg	Glu	Leu	Leu	Pro	Lys	Gln	Leu	Gly	Gln	Tyr	Phe		200	205	210
Arg	Tyr	Asn	Gly	Ser	Leu	Thr	Thr	Pro	Pro	Cys	Tyr	Gln	Ser	Val		215	220	225
Leu	Trp	Thr	Val	Phe	Tyr	Arg	Arg	Ser	Gln	Ile	Ser	Met	Glu	Gln		230	235	240
Leu	Glu	Lys	Leu	Gln	Gly	Thr	Leu	Phe	Ser	Thr	Glu	Glu	Glu	Pro		245	250	255
Ser	Lys	Leu	Leu	Val	Gln	Asn	Tyr	Arg	Ala	Leu	Gln	Pro	Leu	Asn		260	265	270
Gln	Arg	Met	Val	Phe	Ala	Ser	Phe	Ile	Gln	Ala	Gly	Ser	Ser	Tyr		275	280	285
Thr	Thr	Gly	Glu	Met	Leu	Ser	Leu	Gly	Val	Gly	Ile	Leu	Val	Gly		290	295	300
Cys	Leu	Cys	Leu	Leu	Leu	Ala	Val	Tyr	Phe	Ile	Ala	Arg	Lys	Ile		305	310	315
Arg	Lys	Lys	Arg	Leu	Glu	Asn	Arg	Lys	Ser	Val	Val	Phe	Thr	Ser		320	325	330
Ala	Gln	Ala	Thr	Thr	Glu	Ala										335		

<210> 75
 <211> 1743
 <212> DNA

<213> Homo Sapien

<400> 75

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cccaccagag gtggcactga ctacagatga gaagtcatt tctgttgctc 250
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atttctcatc aggatatgag ttactggga aaaagcagtg atgtatccag 800
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agccttctga gggggatggg ctcgagaggg agggctctct atctagactc 1350
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aatgtttgc cagactgggt gcagaattta ttcaggtggg tgt 1743

<210> 76

<211> 442

<212> PRT

<213> Homo Sapien

<400> 76

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Val	Ala	Leu	Thr	Thr	Asp	Glu	Lys	Ser	Ile	Ser	Val	Val	Leu	Thr	35	40	45	
Ala	Pro	Glu	Lys	Trp	Lys	Arg	Asn	Pro	Glu	Asp	Leu	Pro	Val	Ser	50	55	60	
Met	Gln	Gln	Ile	Tyr	Ser	Asn	Leu	Lys	Tyr	Asn	Val	Ser	Val	Leu	65	70	75	
Asn	Thr	Lys	Ser	Asn	Arg	Thr	Trp	Ser	Gln	Cys	Val	Thr	Asn	His	80	85	90	
Thr	Leu	Val	Leu	Thr	Trp	Leu	Glu	Pro	Asn	Thr	Leu	Tyr	Cys	Val	95	100	105	
His	Val	Glu	Ser	Phe	Val	Pro	Gly	Pro	Pro	Arg	Arg	Ala	Gln	Pro	110	115	120	
Ser	Glu	Lys	Gln	Cys	Ala	Arg	Thr	Leu	Lys	Asp	Gln	Ser	Ser	Glu	125	130	135	
Phe	Lys	Ala	Lys	Ile	Ile	Phe	Trp	Tyr	Val	Leu	Pro	Ile	Ser	Ile	140	145	150	
Thr	Val	Phe	Leu	Phe	Ser	Val	Met	Gly	Tyr	Ser	Ile	Tyr	Arg	Tyr	155	160	165	
Ile	His	Val	Gly	Lys	Glu	Lys	His	Pro	Ala	Asn	Leu	Ile	Leu	Ile	170	175	180	

Tyr	Gly	Asn	Glu	Phe	Asp	Lys	Arg	Phe	Phe	Val	Pro	Ala	Glu	Lys	185	190	195
Ile	Val	Ile	Asn	Phe	Ile	Thr	Leu	Asn	Ile	Ser	Asp	Asp	Ser	Lys	200	205	210
Ile	Ser	His	Gln	Asp	Met	Ser	Leu	Leu	Gly	Lys	Ser	Ser	Asp	Val	215	220	225
Ser	Ser	Leu	Asn	Asp	Pro	Gln	Pro	Ser	Gly	Asn	Leu	Arg	Pro	Pro	230	235	240
Gln	Glu	Glu	Glu	Glu	Val	Lys	His	Leu	Gly	Tyr	Ala	Ser	His	Leu	245	250	255
Met	Glu	Ile	Phe	Cys	Asp	Ser	Glu	Glu	Asn	Thr	Glu	Gly	Thr	Ser	260	265	270
Leu	Thr	Gln	Gln	Glu	Ser	Leu	Ser	Arg	Thr	Ile	Pro	Pro	Asp	Lys	275	280	285
Thr	Val	Ile	Glu	Tyr	Glu	Tyr	Asp	Val	Arg	Thr	Thr	Asp	Ile	Cys	290	295	300
Ala	Gly	Pro	Glu	Glu	Gln	Glu	Leu	Ser	Leu	Gln	Glu	Glu	Val	Ser	305	310	315
Thr	Gln	Gly	Thr	Leu	Leu	Glu	Ser	Gln	Ala	Ala	Leu	Ala	Val	Leu	320	325	330
Gly	Pro	Gln	Thr	Leu	Gln	Tyr	Ser	Tyr	Thr	Pro	Gln	Leu	Gln	Asp	335	340	345
Leu	Asp	Pro	Leu	Ala	Gln	Glu	His	Thr	Asp	Ser	Glu	Glu	Gly	Pro	350	355	360
Glu	Glu	Glu	Pro	Ser	Thr	Thr	Leu	Val	Asp	Trp	Asp	Pro	Gln	Thr	365	370	375
Gly	Arg	Leu	Cys	Ile	Pro	Ser	Leu	Ser	Ser	Phe	Asp	Gln	Asp	Ser	380	385	390
Glu	Gly	Cys	Glu	Pro	Ser	Glu	Gly	Asp	Gly	Leu	Gly	Glu	Glu	Gly	395	400	405
Leu	Leu	Ser	Arg	Leu	Tyr	Glu	Glu	Pro	Ala	Pro	Asp	Arg	Pro	Pro	410	415	420
Gly	Glu	Asn	Glu	Thr	Tyr	Leu	Met	Gln	Phe	Met	Glu	Glu	Trp	Gly	425	430	435
Leu	Tyr	Val	Gln	Met	Glu	Asn									440		

<210> 77
 <211> 1636
 <212> DNA

<213> Homo Sapien

<400> 77

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tgcagttctc atcctcggcc caaaagtcac caaagaaaag ctgacacagg 200
agctgaagga ccacaacgcc accagcatcc tgcagcagct gccgctgctc 250
agtgccatgc gggaaaagcc agccggaggc atccctgtgc tgggcagcct 300
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gtcaagatcc ccctggacat ggtggctgga ttcaacacgc ccctggtcaa 450
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cctctctgca atcaataaac acttgctgtg gaaaaa 1636

<210> 78
<211> 484
<212> PRT
<213> Homo Sapien

<400> 78
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20 25 30
Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys
35 40 45
Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser
50 55 60
Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser
65 70 75
Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile
80 85 90
Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp
95 100 105
Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe
110 115 120
Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr
125 130 135
Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro
140 145 150
Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu
155 160 165
Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu
170 175 180
Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu
185 190 195
Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly

	200		205		210
Met Tyr Ala Asp	Leu Leu Gln Leu Val	Lys Val Pro Ile Ser	Leu		
	215		220		225
Ser Ile Asp Arg	Leu Glu Phe Asp Leu	Leu Tyr Pro Ala Ile	Lys		
	230		235		240
Gly Asp Thr Ile	Gln Leu Tyr Leu Gly	Ala Lys Leu Leu Asp	Ser		
	245		250		255
Gln Gly Lys Val	Thr Lys Trp Phe Asn	Asn Ser Ala Ala Ser	Leu		
	260		265		270
Thr Met Pro Thr	Leu Asp Asn Ile Pro	Phe Ser Leu Ile Val	Ser		
	275		280		285
Gln Asp Val Val	Lys Ala Ala Val Ala	Ala Val Leu Ser Pro	Glu		
	290		295		300
Glu Phe Met Val	Leu Leu Asp Ser Val	Leu Pro Glu Ser Ala	His		
	305		310		315
Arg Leu Lys Ser	Ser Ile Gly Leu Ile	Asn Glu Lys Ala Ala	Asp		
	320		325		330
Lys Leu Gly Ser	Thr Gln Ile Val Lys	Ile Leu Thr Gln Asp	Thr		
	335		340		345
Pro Glu Phe Phe	Ile Asp Gln Gly His	Ala Lys Val Ala Gln	Leu		
	350		355		360
Ile Val Leu Glu	Val Phe Pro Ser Ser	Glu Ala Leu Arg Pro	Leu		
	365		370		375
Phe Thr Leu Gly	Ile Glu Ala Ser Ser	Glu Ala Gln Phe Tyr	Thr		
	380		385		390
Lys Gly Asp Gln	Leu Ile Leu Asn Leu	Asn Asn Ile Ser Ser	Asp		
	395		400		405
Arg Ile Gln Leu	Met Asn Ser Gly Ile	Gly Trp Phe Gln Pro	Asp		
	410		415		420
Val Leu Lys Asn	Ile Ile Thr Glu Ile	Ile His Ser Ile Leu	Leu		
	425		430		435
Pro Asn Gln Asn	Gly Lys Leu Arg Ser	Gly Val Pro Val Ser	Leu		
	440		445		450
Val Lys Ala Leu	Gly Phe Glu Ala Ala	Glu Ser Ser Leu Thr	Lys		
	455		460		465
Asp Ala Leu Val	Leu Thr Pro Ala Ser	Leu Trp Lys Pro Ser	Ser		
	470		475		480
Pro Val Ser Gln					

<210> 79
 <211> 1475
 <212> DNA
 <213> Homo Sapien

<400> 79
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 ctacatccta ggccttctgg ggcttttggg cacactgggt gccatgctgc 200
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<210> 80
 <211> 230
 <212> PRT
 <213> Homo Sapien

<400> 80
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 20 25 30
 Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly
 35 40 45
 Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly
 50 55 60
 Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala
 65 70 75
 Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile
 80 85 90
 Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr
 95 100 105
 Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala
 110 115 120
 Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro
 125 130 135
 Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro
 140 145 150
 Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr
 155 160 165
 Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile
 170 175 180
 Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr
 185 190 195
 Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser Pro Arg
 200 205 210

Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser
 215 220 225

Leu Thr Gly Tyr Val
 230

<210> 81
 <211> 1732
 <212> DNA
 <213> Homo Sapien

<400> 81
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 cttagacctc ccttctgcc ctctttcct gccaccgct gcttctggc 150
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 gagggctctc tcctccttgc tgggactcgc gctgctctgg tccccctgg 350
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<210> 82
 <211> 451
 <212> PRT
 <213> Homo Sapien

<400> 82
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 35 40 45
 Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
 50 55 60
 Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
 65 70 75
 Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
 80 85 90
 Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg
 95 100 105
 Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
 110 115 120
 Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro
 125 130 135

Asn	Gln	Cys	Val	Leu	Cys	Ser	Cys	Thr	Glu	Gly	Gln	Ile	Tyr	Cys		140	145	150
Gly	Leu	Thr	Thr	Cys	Pro	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Leu	Pro		155	160	165
Leu	Pro	Asp	Ser	Cys	Cys	Gln	Ala	Cys	Lys	Asp	Glu	Ala	Ser	Glu		170	175	180
Gln	Ser	Asp	Glu	Glu	Asp	Ser	Val	Gln	Ser	Leu	His	Gly	Val	Arg		185	190	195
His	Pro	Gln	Asp	Pro	Cys	Ser	Ser	Asp	Ala	Gly	Arg	Lys	Arg	Gly		200	205	210
Pro	Gly	Thr	Pro	Ala	Pro	Thr	Gly	Leu	Ser	Ala	Pro	Leu	Ser	Phe		215	220	225
Ile	Pro	Arg	His	Phe	Arg	Pro	Lys	Gly	Ala	Gly	Ser	Thr	Thr	Val		230	235	240
Lys	Ile	Val	Leu	Lys	Glu	Lys	His	Lys	Lys	Ala	Cys	Val	His	Gly		245	250	255
Gly	Lys	Thr	Tyr	Ser	His	Gly	Glu	Val	Trp	His	Pro	Ala	Phe	Arg		260	265	270
Ala	Phe	Gly	Pro	Leu	Pro	Cys	Ile	Leu	Cys	Thr	Cys	Glu	Asp	Gly		275	280	285
Arg	Gln	Asp	Cys	Gln	Arg	Val	Thr	Cys	Pro	Thr	Glu	Tyr	Pro	Cys		290	295	300
Arg	His	Pro	Glu	Lys	Val	Ala	Gly	Lys	Cys	Cys	Lys	Ile	Cys	Pro		305	310	315
Glu	Asp	Lys	Ala	Asp	Pro	Gly	His	Ser	Glu	Ile	Ser	Ser	Thr	Arg		320	325	330
Cys	Pro	Lys	Ala	Pro	Gly	Arg	Val	Leu	Val	His	Thr	Ser	Val	Ser		335	340	345
Pro	Ser	Pro	Asp	Asn	Leu	Arg	Arg	Phe	Ala	Leu	Glu	His	Glu	Ala		350	355	360
Ser	Asp	Leu	Val	Glu	Ile	Tyr	Leu	Trp	Lys	Leu	Val	Lys	Asp	Glu		365	370	375
Glu	Thr	Glu	Ala	Gln	Arg	Gly	Glu	Val	Pro	Gly	Pro	Arg	Pro	His		380	385	390
Ser	Gln	Asn	Leu	Pro	Leu	Asp	Ser	Asp	Gln	Glu	Ser	Gln	Glu	Ala		395	400	405
Arg	Leu	Pro	Glu	Arg	Gly	Thr	Ala	Leu	Pro	Thr	Ala	Arg	Trp	Pro		410	415	420

Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala
 425 430 435

Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys
 440 445 450

Thr

<210> 83
 <211> 2052
 <212> DNA
 <213> Homo Sapien

<400> 83
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 gttctctctt tctctctaatt ccatccgtca cctctctctgt catccgtttc 150
 catgccgtga ggtccattca cagaacacat ccatggctct catgctcagt 200
 ttggttctga gtctcctcaa gctgggatca gggcagtggc aggtgtttgg 250
 gccagacaag cctgtccagg ccttgggtggg ggaggacgca gcattctcct 300
 gtttctctgtc tcctaagacc aatgcagagg ccatggaagt gcggttcttc 350
 aggggccagt tctctagcgt ggtccacctc tacagggacg ggaaggacca 400
 gccatttatg cagatgccac agtatcaagg caggacaaaa ctggtgaagg 450
 attctattgc ggagggggcg atctctctga ggctggaaaa cattactgtg 500
 ttggatgctg gcctctatgg gtgcaggatt agttcccagt cttactacca 550
 gaaggccatc tgggagctac aggtgtcagc actgggctca gttcctctca 600
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 ggatttgtcc acagactcca ggacaaacag agacatgcat ggctgtttg 750
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 tccatgcggc atgctcatct gagccgagag gtggaatcca gggtagagat 850
 aggagatacc tttttcgagc ctatatcgtg gcacctggct accaaagtac 900
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 aaagcacgga caggcagaat tgagagacgc ccggaaacac gcagtggagg 1050

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 aaaactgtaa cccatagaaa agctccccag gaggtgcctc actctgagaa 1150
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 atgggagtca ggtgtcatgg ctgccctgag ctgggagggg agaaggctga 1850
 cattacattt agtttgctct cactccatct ggctaagtga tcttgaaata 1900
 ccacctctca ggtgaagaac cgtcaggaat tcccatctca caggctgtgg 1950
 tgtagattaa gtagacaagg aatgtgaata atgcttagat cttattgatg 2000
 acagagtgta tcctaattgg ttgttcatta tattacactt tcagtaaaaa 2050

aa 2052

<210> 84
 <211> 500
 <212> PRT
 <213> Homo Sapien

<400> 84
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 20 25 30
 Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys
 35 40 45
 Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe

				50					55					60
Ser	Ser	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Lys	Asp	Gln	Pro	Phe
				65					70					75
Met	Gln	Met	Pro	Gln	Tyr	Gln	Gly	Arg	Thr	Lys	Leu	Val	Lys	Asp
				80					85					90
Ser	Ile	Ala	Glu	Gly	Arg	Ile	Ser	Leu	Arg	Leu	Glu	Asn	Ile	Thr
				95					100					105
Val	Leu	Asp	Ala	Gly	Leu	Tyr	Gly	Cys	Arg	Ile	Ser	Ser	Gln	Ser
				110					115					120
Tyr	Tyr	Gln	Lys	Ala	Ile	Trp	Glu	Leu	Gln	Val	Ser	Ala	Leu	Gly
				125					130					135
Ser	Val	Pro	Leu	Ile	Ser	Ile	Thr	Gly	Tyr	Val	Asp	Arg	Asp	Ile
				140					145					150
Gln	Leu	Leu	Cys	Gln	Ser	Ser	Gly	Trp	Phe	Pro	Arg	Pro	Thr	Ala
				155					160					165
Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Thr	Asp	Ser	Arg
				170					175					180
Thr	Asn	Arg	Asp	Met	His	Gly	Leu	Phe	Asp	Val	Glu	Ile	Ser	Leu
				185					190					195
Thr	Val	Gln	Glu	Asn	Ala	Gly	Ser	Ile	Ser	Cys	Ser	Met	Arg	His
				200					205					210
Ala	His	Leu	Ser	Arg	Glu	Val	Glu	Ser	Arg	Val	Gln	Ile	Gly	Asp
				215					220					225
Thr	Phe	Phe	Glu	Pro	Ile	Ser	Trp	His	Leu	Ala	Thr	Lys	Val	Leu
				230					235					240
Gly	Ile	Leu	Cys	Cys	Gly	Leu	Phe	Phe	Gly	Ile	Val	Gly	Leu	Lys
				245					250					255
Ile	Phe	Phe	Ser	Lys	Phe	Gln	Trp	Lys	Ile	Gln	Ala	Glu	Leu	Asp
				260					265					270
Trp	Arg	Arg	Lys	His	Gly	Gln	Ala	Glu	Leu	Arg	Asp	Ala	Arg	Lys
				275					280					285
His	Ala	Val	Glu	Val	Thr	Leu	Asp	Pro	Glu	Thr	Ala	His	Pro	Lys
				290					295					300
Leu	Cys	Val	Ser	Asp	Leu	Lys	Thr	Val	Thr	His	Arg	Lys	Ala	Pro
				305					310					315
Gln	Glu	Val	Pro	His	Ser	Glu	Lys	Arg	Phe	Thr	Arg	Lys	Ser	Val
				320					325					330
Val	Ala	Ser	Gln	Ser	Phe	Gln	Ala	Gly	Lys	His	Tyr	Trp	Glu	Val

335	340	345
Asp Gly Gly His Asn Lys Arg Trp Arg Val Gly Val Cys Arg Asp		
350	355	360
Asp Val Asp Arg Arg Lys Glu Tyr Val Thr Leu Ser Pro Asp His		
365	370	375
Gly Tyr Trp Val Leu Arg Leu Asn Gly Glu His Leu Tyr Phe Thr		
380	385	390
Leu Asn Pro Arg Phe Ile Ser Val Phe Pro Arg Thr Pro Pro Thr		
395	400	405
Lys Ile Gly Val Phe Leu Asp Tyr Glu Cys Gly Thr Ile Ser Phe		
410	415	420
Phe Asn Ile Asn Asp Gln Ser Leu Ile Tyr Thr Leu Thr Cys Arg		
425	430	435
Phe Glu Gly Leu Leu Arg Pro Tyr Ile Glu Tyr Pro Ser Tyr Asn		
440	445	450
Glu Gln Asn Gly Thr Pro Ile Val Ile Cys Pro Val Thr Gln Glu		
455	460	465
Ser Glu Lys Glu Ala Ser Trp Gln Arg Ala Ser Ala Ile Pro Glu		
470	475	480
Thr Ser Asn Ser Glu Ser Ser Ser Gln Ala Thr Thr Pro Phe Leu		
485	490	495
Pro Arg Gly Glu Met		
500		

<210> 85
 <211> 1665
 <212> DNA
 <213> Homo Sapien

<400> 85
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 gtaaactgct gacgatgcag agttccgtga cgggtgcagga aggctgtgt 150
 gtccatgtgc cctgctcctt ctctacccc tcgcatggct ggatttacct 200
 tggcccagta gttcatggct actggttccg ggaaggggccc aatacagacc 250
 aggatgctcc agtggccaca aacaacccag ctcgggcagt gtgggaggag 300
 actcgggacc gattccacct ccttggggac ccacatacca agaattgcac 350
 cctgagcatc agagatgcc aagaagtga tgcggggaga tacttctttc 400

gtatggagaa aggaagtata aaatggaatt ataaacatca ccggctctct 450
 gtgaatgtga cagccttgac ccacaggccc aacatcctca tcccaggcac 500
 cctggagtcc ggctgcccc agaatctgac ctgctctgtg ccctgggcct 550
 gtgagcaggg gacaccccct atgatctcct ggataggac ctccgtgtcc 600
 cccctggacc cctccaccac ccgctcctcg gtgctcacc tcatcccaca 650
 gccccaggac catggcacca gcctcacctg tcaggtgacc ttccctgggg 700
 ccagcgtgac cacgaacaag accgtccatc tcaacgtgtc ctacccgcct 750
 cagaacttga ccatgactgt cttccaagga gacggcacag tatccacagt 800
 cttgggaaat ggctcatctc tgtcactccc agagggccag tctctgcgcc 850
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 ctgagctgga gaggcctgac cctgtgcccc tcacagccct caaaccggg 950
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 tggagccaca gccctggtct tctgtcctt ctgcgtcatc ttcgtttag 1150
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 acgggcatag aggatgcaaa cgctgtcagg ggttcagcct ctcaggggcc 1250
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 cttctgcccc ctcctcagtg ggggaaggag agctccagta tgcattcctc 1350
 agcttccaga tggatgaagc ttgggactcg cggggacagg aggccactga 1400
 caccgagtac tcggagatca agatccacag atgagaaact gcagagactc 1450
 accctgattg agggatcaca gccctccag gcaagggaga agtcagaggc 1500
 tgattcttgt agaattaaca gccctcaacg tgatgagcta tgataacact 1550
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 acagacaaat tccta 1665

<210> 86
 <211> 463
 <212> PRT
 <213> Homo Sapien

<400> 86

Met	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Leu	Trp	Gly	Arg	Glu	Arg	Ala	1	5	10	15
Glu	Gly	Gln	Thr	Ser	Lys	Leu	Leu	Thr	Met	Gln	Ser	Ser	Val	Thr	20	25	30	
Val	Gln	Glu	Gly	Leu	Cys	Val	His	Val	Pro	Cys	Ser	Phe	Ser	Tyr	35	40	45	
Pro	Ser	His	Gly	Trp	Ile	Tyr	Pro	Gly	Pro	Val	Val	His	Gly	Tyr	50	55	60	
Trp	Phe	Arg	Glu	Gly	Ala	Asn	Thr	Asp	Gln	Asp	Ala	Pro	Val	Ala	65	70	75	
Thr	Asn	Asn	Pro	Ala	Arg	Ala	Val	Trp	Glu	Glu	Thr	Arg	Asp	Arg	80	85	90	
Phe	His	Leu	Leu	Gly	Asp	Pro	His	Thr	Lys	Asn	Cys	Thr	Leu	Ser	95	100	105	
Ile	Arg	Asp	Ala	Arg	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Phe	Phe	Arg	110	115	120	
Met	Glu	Lys	Gly	Ser	Ile	Lys	Trp	Asn	Tyr	Lys	His	His	Arg	Leu	125	130	135	
Ser	Val	Asn	Val	Thr	Ala	Leu	Thr	His	Arg	Pro	Asn	Ile	Leu	Ile	140	145	150	
Pro	Gly	Thr	Leu	Glu	Ser	Gly	Cys	Pro	Gln	Asn	Leu	Thr	Cys	Ser	155	160	165	
Val	Pro	Trp	Ala	Cys	Glu	Gln	Gly	Thr	Pro	Pro	Met	Ile	Ser	Trp	170	175	180	
Ile	Gly	Thr	Ser	Val	Ser	Pro	Leu	Asp	Pro	Ser	Thr	Thr	Arg	Ser	185	190	195	
Ser	Val	Leu	Thr	Leu	Ile	Pro	Gln	Pro	Gln	Asp	His	Gly	Thr	Ser	200	205	210	
Leu	Thr	Cys	Gln	Val	Thr	Phe	Pro	Gly	Ala	Ser	Val	Thr	Thr	Asn	215	220	225	
Lys	Thr	Val	His	Leu	Asn	Val	Ser	Tyr	Pro	Pro	Gln	Asn	Leu	Thr	230	235	240	
Met	Thr	Val	Phe	Gln	Gly	Asp	Gly	Thr	Val	Ser	Thr	Val	Leu	Gly	245	250	255	
Asn	Gly	Ser	Ser	Leu	Ser	Leu	Pro	Glu	Gly	Gln	Ser	Leu	Arg	Leu	260	265	270	
Val	Cys	Ala	Val	Asp	Ala	Val	Asp	Ser	Asn	Pro	Pro	Ala	Arg	Leu	275	280	285	

Ser	Leu	Ser	Trp	Arg	Gly	Leu	Thr	Leu	Cys	Pro	Ser	Gln	Pro	Ser	
				290					295					300	
Asn	Pro	Gly	Val	Leu	Glu	Leu	Pro	Trp	Val	His	Leu	Arg	Asp	Ala	
				305					310					315	
Ala	Glu	Phe	Thr	Cys	Arg	Ala	Gln	Asn	Pro	Leu	Gly	Ser	Gln	Gln	
				320					325					330	
Val	Tyr	Leu	Asn	Val	Ser	Leu	Gln	Ser	Lys	Ala	Thr	Ser	Gly	Val	
				335					340					345	
Thr	Gln	Gly	Val	Val	Gly	Gly	Ala	Gly	Ala	Thr	Ala	Leu	Val	Phe	
				350					355					360	
Leu	Ser	Phe	Cys	Val	Ile	Phe	Val	Val	Val	Arg	Ser	Cys	Arg	Lys	
				365					370					375	
Lys	Ser	Ala	Arg	Pro	Ala	Ala	Gly	Val	Gly	Asp	Thr	Gly	Ile	Glu	
				380					385					390	
Asp	Ala	Asn	Ala	Val	Arg	Gly	Ser	Ala	Ser	Gln	Gly	Pro	Leu	Thr	
				395					400					405	
Glu	Pro	Trp	Ala	Glu	Asp	Ser	Pro	Pro	Asp	Gln	Pro	Pro	Pro	Ala	
				410					415					420	
Ser	Ala	Arg	Ser	Ser	Val	Gly	Glu	Gly	Glu	Leu	Gln	Tyr	Ala	Ser	
				425					430					435	
Leu	Ser	Phe	Gln	Met	Val	Lys	Pro	Trp	Asp	Ser	Arg	Gly	Gln	Glu	
				440					445					450	
Ala	Thr	Asp	Thr	Glu	Tyr	Ser	Glu	Ile	Lys	Ile	His	Arg			
				455					460						

<210> 87
 <211> 1176
 <212> DNA
 <213> Homo Sapien

<400> 87
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 caatgaacca actcagcttc ctgctgtttc tcatagcgac caccagagga 150
 tggagtacag atgaggctaa tacttacttc aaggaatgga cctgttcttc 200
 gtctccatct ctgccagaa gctgcaagga aatcaaagac gaatgtccta 250
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 cagaccttct gtgacatgac ctctgggggt ggcggctgga ccctggtggc 350
 cagcgtgcat gagaatgaca tgcgtgggaa gtgcacggtg ggcgatcgct 400

ggtccagtca gcagggcagc aaagcagact acccagaggg ggacggcaac 450
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 ctacaagaac cctggctact acgacatcca ggccaaggac ctgggcatct 550
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 ctgaggtacc gcacggacac tggcttcctc cagacactgg gacataatct 650
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 ttctggtttt gattggagtg gatatggaac tcatgttggt tacagcagca 1000
 gccgtgagat aactgaggca gctgtgcttc tattctatcg ttgagagttt 1050
 tgtgggaggg aaccagacc tctcctccca accatgagat cccaaggatg 1100
 gagaacaact taccagtag ctagaatgtt aatggcagaa gagaaaacaa 1150
 taaatcatat tgactcaaga aaaaaa 1176

<210> 88
 <211> 313
 <212> PRT
 <213> Homo Sapien

<400> 88
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 Gly Trp Ser Thr Asp Glu Ala Asn Thr Tyr Phe Lys Glu Trp Thr
 20 25 30
 Cys Ser Ser Ser Pro Ser Leu Pro Arg Ser Cys Lys Glu Ile Lys
 35 40 45
 Asp Glu Cys Pro Ser Ala Phe Asp Gly Leu Tyr Phe Leu Arg Thr
 50 55 60
 Glu Asn Gly Val Ile Tyr Gln Thr Phe Cys Asp Met Thr Ser Gly
 65 70 75
 Gly Gly Gly Trp Thr Leu Val Ala Ser Val His Glu Asn Asp Met
 80 85 90

Arg	Gly	Lys	Cys	Thr	Val	Gly	Asp	Arg	Trp	Ser	Ser	Gln	Gln	Gly	
				95					100					105	
Ser	Lys	Ala	Asp	Tyr	Pro	Glu	Gly	Asp	Gly	Asn	Trp	Ala	Asn	Tyr	
				110					115					120	
Asn	Thr	Phe	Gly	Ser	Ala	Glu	Ala	Ala	Thr	Ser	Asp	Asp	Tyr	Lys	
				125					130					135	
Asn	Pro	Gly	Tyr	Tyr	Asp	Ile	Gln	Ala	Lys	Asp	Leu	Gly	Ile	Trp	
				140					145					150	
His	Val	Pro	Asn	Lys	Ser	Pro	Met	Gln	His	Trp	Arg	Asn	Ser	Ser	
				155					160					165	
Leu	Leu	Arg	Tyr	Arg	Thr	Asp	Thr	Gly	Phe	Leu	Gln	Thr	Leu	Gly	
				170					175					180	
His	Asn	Leu	Phe	Gly	Ile	Tyr	Gln	Lys	Tyr	Pro	Val	Lys	Tyr	Gly	
				185					190					195	
Glu	Gly	Lys	Cys	Trp	Thr	Asp	Asn	Gly	Pro	Val	Ile	Pro	Val	Val	
				200					205					210	
Tyr	Asp	Phe	Gly	Asp	Ala	Gln	Lys	Thr	Ala	Ser	Tyr	Tyr	Ser	Pro	
				215					220					225	
Tyr	Gly	Gln	Arg	Glu	Phe	Thr	Ala	Gly	Phe	Val	Gln	Phe	Arg	Val	
				230					235					240	
Phe	Asn	Asn	Glu	Arg	Ala	Ala	Asn	Ala	Leu	Cys	Ala	Gly	Met	Arg	
				245					250					255	
Val	Thr	Gly	Cys	Asn	Thr	Glu	His	His	Cys	Ile	Gly	Gly	Gly	Gly	
				260					265					270	
Tyr	Phe	Pro	Glu	Ala	Ser	Pro	Gln	Gln	Cys	Gly	Asp	Phe	Ser	Gly	
				275					280					285	
Phe	Asp	Trp	Ser	Gly	Tyr	Gly	Thr	His	Val	Gly	Tyr	Ser	Ser	Ser	
				290					295					300	
Arg	Glu	Ile	Thr	Glu	Ala	Ala	Val	Leu	Leu	Phe	Tyr	Arg			
				305					310						

<210> 89
 <211> 759
 <212> DNA
 <213> Homo Sapien

<400> 89
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 tccagcctca gagaccgccg cccttgctcc cgagggccat gggccgggtc 100
 tcagggttg tgccctctcg cttctgacg ctctggcgc atctggtggt 150

cgtcatcacc ttattctggt cccgggacag caacatacag gcctgcctgc 200
 ctctcacggt cacc'ccgag gagtatgaca agcaggacat tcagctggtg 250
 gccgcgctct ctgtcacctt gggcctcttt gcagtggagc tggccggttt 300
 cctctcagga gtctccatgt tcaacagcac ccagagcctc atctccattg 350
 gggctcactg tagtgcattc gtggccctgt ccttcttcat attcgagcgt 400
 tgggagtgca ctacgtattg gtacattttt gtcttctgca gtgcccttcc 450
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 aacccttctg attaccttca tgacgggaac ctaaggacga agcctacagg 550
 ggcaagggcc gcttcgtatt cctggaagaa ggaaggcata ggcttcggtt 600
 ttcccctcgg aaactgcttc tgctggagga tatgtgttgg aataattacg 650
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 tgttttgtag taacattaag acttatatac agtttttaggg gacaattaa 750
 aaaaaaaaa 759

<210> 90
 <211> 140
 <212> PRT
 <213> Homo Sapien

<400> 90
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 Leu Ala His Leu Val Val Val Ile Thr Leu Phe Trp Ser Arg Asp
 20 25 30
 Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu
 35 40 45
 Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
 50 55 60
 Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
 65 70 75
 Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
 80 85 90
 Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp
 95 100 105
 Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu
 110 115 120
 Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu

125

130

135

Lys Lys Lys Pro Phe
140

<210> 91

<211> 1871

<212> DNA

<213> Homo Sapien

<400> 91

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tctatctggt catctgtggc caggatgatg gtcctcccgg ctgagaggac 150
cctgagcgtg atgaccacga gggccagccc cggccccggg tgcctcggaa 200
gcggggccac atctcaccta agtcccggcc catggccaat tccactctcc 250
tagggctgct ggccccgcct ggggaggctt ggggcattct tgggcagccc 300
cccaaccgcc cgaaccacag cccccaccc tcagccaagg tgaagaaaat 350
ctttggctgg ggcgacttct actccaacat caagacggtg gccctgaacc 400
tgctcgtcac agggaagatt gtggaccatg gcaatgggac cttcagcgtc 450
cacttccaac acaatgccac aggccaggga aacatctcca tcagcctcgt 500
gccccccagt aaagctgtag agttccacca ggaacagcag atcttcacgc 550
aagccaaggc ctccaaaatc ttcaactgcc ggatggagtg ggagaaggta 600
gaacggggcc gccggacctc gctttgcacc cacgaccag ccaagatctg 650
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gtccagaagg tgtgccaga ttacaactac catagtata cccctacta 800
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aacctgaagc tgtggagtga ctagatcaca ggagcactgg aggaggagtg 1050
ggctctctgt gcagcctcac agggctttgc cacggagcca cagagagatg 1100
ctgggtcccc gaggcctgtg ggcaggccga tcagtgtggc ccagatcaa 1150
gtcatgggag gaagctaagc ccttggttct tgccatcctg aggaaagata 1200

gcaacagggga gggggagatt tcatcagtgt ggacagcctg tcaacttagg 1250
atggatggct gagagggctt cctaggagcc agtcagcagg gtgggggtggg 1300
gccagaggag ctctccagcc ctgcctagtg ggcgcctga gccccttgtc 1350
gtgtgctgag catggcatga ggctgaagtg gcaaccctgg ggtctttgat 1400
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tgttctgtgt gtctgtctgt ggggtggggg aggggagggg agtcttgtga 1800
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aataaagctt gccccggggc a 1871

<210> 92

<211> 252

<212> PRT

<213> Homo Sapien

<400> 92

Met	Gln	Leu	Thr	Arg	Cys	Cys	Phe	Val	Phe	Leu	Val	Gln	Gly	Ser	1	5	10	15
Leu	Tyr	Leu	Val	Ile	Cys	Gly	Gln	Asp	Asp	Gly	Pro	Pro	Gly	Ser	20	25	30	
Glu	Asp	Pro	Glu	Arg	Asp	Asp	His	Glu	Gly	Gln	Pro	Arg	Pro	Arg	35	40	45	
Val	Pro	Arg	Lys	Arg	Gly	His	Ile	Ser	Pro	Lys	Ser	Arg	Pro	Met	50	55	60	
Ala	Asn	Ser	Thr	Leu	Leu	Gly	Leu	Leu	Ala	Pro	Pro	Gly	Glu	Ala	65	70	75	
Trp	Gly	Ile	Leu	Gly	Gln	Pro	Pro	Asn	Arg	Pro	Asn	His	Ser	Pro	80	85	90	
Pro	Pro	Ser	Ala	Lys	Val	Lys	Lys	Ile	Phe	Gly	Trp	Gly	Asp	Phe	95	100	105	
Tyr	Ser	Asn	Ile	Lys	Thr	Val	Ala	Leu	Asn	Leu	Leu	Val	Thr	Gly	110	115	120	

Lys	Ile	Val	Asp	His	Gly	Asn	Gly	Thr	Phe	Ser	Val	His	Phe	Gln	
					125					130				135	
His	Asn	Ala	Thr	Gly	Gln	Gly	Asn	Ile	Ser	Ile	Ser	Leu	Val	Pro	
					140					145				150	
Pro	Ser	Lys	Ala	Val	Glu	Phe	His	Gln	Glu	Gln	Gln	Ile	Phe	Ile	
					155					160				165	
Glu	Ala	Lys	Ala	Ser	Lys	Ile	Phe	Asn	Cys	Arg	Met	Glu	Trp	Glu	
					170					175				180	
Lys	Val	Glu	Arg	Gly	Arg	Arg	Thr	Ser	Leu	Cys	Thr	His	Asp	Pro	
					185					190				195	
Ala	Lys	Ile	Cys	Ser	Arg	Asp	His	Ala	Gln	Ser	Ser	Ala	Thr	Trp	
					200					205				210	
Ser	Cys	Ser	Gln	Pro	Phe	Lys	Val	Val	Cys	Val	Tyr	Ile	Ala	Phe	
					215					220				225	
Tyr	Ser	Thr	Asp	Tyr	Arg	Leu	Val	Gln	Lys	Val	Cys	Pro	Asp	Tyr	
					230					235				240	
Asn	Tyr	His	Ser	Asp	Thr	Pro	Tyr	Tyr	Pro	Ser	Gly				
					245					250					

<210> 93
 <211> 902
 <212> DNA
 <213> Homo Sapien

<400> 93
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 gggcctgcgc tcgcccttta tgtcttcacc atcgccatcg agccgttgcg 100
 tatcatcttc ctcacgcgcg gagctttctt ctggttggtg tctctactga 150
 tttcgtccct tgtttggttc atggcaagag tcattattga caacaagat 200
 ggaccaacac agaaatatct gctgatcttt ggagcgtttg tctctgtcta 250
 tatccaagaa atgttccgat ttgcatatta taaactctta aaaaaagcca 300
 gtgaaggttt gaagagtata aaccaggtg agacagcacc ctctatgcga 350
 ctgctggcct atgtttctgg cttgggcttt ggaatcatga gtggagtatt 400
 ttcttttggt aataccctat ctgactcctt ggggccaggc acagtgggca 450
 ttcatggaga ttctcctcaa ttcttccttt attcagcttt catgacgctg 500
 gtcattatct tgctgcatgt attctggggc attgtatatt ttgatggctg 550
 tgagaagaaa aagtggggca tcttccttat cgttctcctg acccacctgc 600

tgggtgtcagc ccagaccttc ataagttctt attatggaat aaacctggcg 650
 tcagcattta taatcctggt gctcatgggc acctgggcat tcttagctgc 700
 gggaggcagc tgccgaagcc tgaaactctg cctgctctgc caagacaaga 750
 actttcttct ttacaaccag cgctccagat aacctcaggg aaccagcact 800
 tcccaaaccg cagactacat ctttagagga agcacaactg tgcctttttc 850
 tgaaaatccc tttttctggt ggaattgaga aagaaataaa actatgcaga 900
 ta 902

<210> 94
 <211> 257
 <212> PRT
 <213> Homo Sapien

<400> 94
 Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly
 1 5 10 15
 Pro Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Ile Glu Pro Leu
 20 25 30
 Arg Ile Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser
 35 40 45
 Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile
 50 55 60
 Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly
 65 70 75
 Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr
 80 85 90
 Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn
 95 100 105
 Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser
 110 115 120
 Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn
 125 130 135
 Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly
 140 145 150
 Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val
 155 160 165
 Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly
 170 175 180

Cys	Glu	Lys	Lys	Lys	Trp	Gly	Ile	Leu	Leu	Ile	Val	Leu	Leu	Thr
				185					190					195
His	Leu	Leu	Val	Ser	Ala	Gln	Thr	Phe	Ile	Ser	Ser	Tyr	Tyr	Gly
				200					205					210
Ile	Asn	Leu	Ala	Ser	Ala	Phe	Ile	Ile	Leu	Val	Leu	Met	Gly	Thr
				215					220					225
Trp	Ala	Phe	Leu	Ala	Ala	Gly	Gly	Ser	Cys	Arg	Ser	Leu	Lys	Leu
				230					235					240
Cys	Leu	Leu	Cys	Gln	Asp	Lys	Asn	Phe	Leu	Leu	Tyr	Asn	Gln	Arg
				245					250					255

Ser Arg

<210> 95
 <211> 1073
 <212> DNA
 <213> Homo Sapien

<400> 95
 aattttttcac cagagtaaacc ttgagaaacc aactggacct tgagtattgt 50
 acattttgcc tcgtggaccc aaaggtagca atctgaaaca tgaggagtac 100
 gattctactg ttttgtcttc taggatcaac tcggtcatta ccacagctca 150
 aacctgcttt gggactccct cccacaaaac tggctccgga tcaggggaaca 200
 ctaccaaacc aacagcagtc aaatcaggtc tttccttctt taagtctgat 250
 accattaaca cagatgctca cactggggcc agatctgcat ctgttaaata 300
 ctgctgcagg aatgacacct ggtaccaga cccaccatt gaccctggga 350
 gggttgaatg tacaacagca actgcacca catgtgttac caatttttgt 400
 cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450
 aaatcttcac gagcctcatc atccattcct tgttcccggg aggcattcctg 500
 cccaccagtc aggcaggggc taatccagat gtccaggatg gaagccttcc 550
 agcaggagga gcaggtgtaa atcctgccac ccagggaacc ccagcaggcc 600
 gcctcccaac tcccagtggc acagatgacg actttgcagt gaccaccct 650
 gcaggcatcc aaaggagcac acatgccatc gaggaagcca ccacagaatc 700
 agcaaataga attcagtaag ctgtttcaaa ttttttcaac taagctgcct 750
 cgaatttggt gatacatgtg aatctttatc attgattata ttatggaata 800
 gattgagaca cattggatag tcttagaaga aattaattct taatttacct 850

gaaaatattc ttgaaatttc agaaaatatg ttctatgtag agaattccaa 900
 cttttaaaaa caataattca atggataaat ctgtctttga aatataacat 950
 tatgctgcct ggatgatatg catattaaaa catatttgga aaactggaaa 1000
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050
 aaaaaaaaaa aaaaaaaaaa aaa 1073

<210> 96
 <211> 209
 <212> PRT
 <213> Homo Sapien

<400> 96
 Met Arg Ser Thr Ile Leu Leu Phe Cys Leu Leu Gly Ser Thr Arg
 1 5 10 15
 Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys
 20 25 30
 Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Gln Ser Asn
 35 40 45
 Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu
 50 55 60
 Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met
 65 70 75
 Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn
 80 85 90
 Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr
 95 100 105
 Gln Leu Gly Ala Gln Gly Thr Ile Leu Ser Ser Glu Glu Leu Pro
 110 115 120
 Gln Ile Phe Thr Ser Leu Ile Ile His Ser Leu Phe Pro Gly Gly
 125 130 135
 Ile Leu Pro Thr Ser Gln Ala Gly Ala Asn Pro Asp Val Gln Asp
 140 145 150
 Gly Ser Leu Pro Ala Gly Gly Ala Gly Val Asn Pro Ala Thr Gln
 155 160 165
 Gly Thr Pro Ala Gly Arg Leu Pro Thr Pro Ser Gly Thr Asp Asp
 170 175 180
 Asp Phe Ala Val Thr Thr Pro Ala Gly Ile Gln Arg Ser Thr His
 185 190 195
 Ala Ile Glu Glu Ala Thr Thr Glu Ser Ala Asn Gly Ile Gln

<210> 97
 <211> 2848
 <212> DNA
 <213> Homo Sapien

<400> 97
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 tggagaagga gctctcttct tgcttggcag ctggaccaag ggagccagtc 100
 ttgggcgctg gagggcctgt cctgaccatg gtccttgcct ggctgtggct 150
 gctttgtgtc tccgtccccc aggctctccc caaggcccag cctgcagagc 200
 tgtctgtgga agttccagaa aactatgggtg gaaatttccc ttataacctg 250
 accaagttgc cgctgccccg tgaggggggt gaaggccaga tcgtgctgtc 300
 aggggactca ggcaaggcaa ctgagggccc atttgctatg gatccagatt 350
 ctggcttctc gctggtgacc agggccctgg accgagagga gcaggcagag 400
 taccagctac aggtcacctt ggagatgcag gatggacatg tcttgtgggg 450
 tccacagcct gtgcttgtgc acgtgaagga tgagaatgac caggtgcccc 500
 atttctctca agccatctac agagctcggc tgagccgggg taccaggcct 550
 ggcattccct tcctcttctt tgaggcttca gaccgggatg agccaggcac 600
 agccaactcg gatcttcgat tccacatcct gagccaggct ccagcccagc 650
 cttccccaga catgttccag ctggagcctc ggctgggggc tctggccctc 700
 agccccaagg ggagcaccag ccttgaccac gccctggaga ggacctacca 750
 gctgttggtg caggtcaagg acatgggtga ccaggcctca ggccaccagg 800
 ccactgccac cgtggaagtc tccatcatag agagcacctg ggtgtcccta 850
 gagcctatcc acctggcaga gaatctcaaa gtcctatacc cgcaccacat 900
 ggcccaggta cactggagtg ggggtgatgt gcactatcac ctggagagcc 950
 atcccccgga accctttgaa gtgaatgcag agggaaacct ctacgtgacc 1000
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 tgggtgatga tgagaatgac aacgtgccta tctgccctcc ccgtgacccc 1150
 acagtcagca tccctgagct cagtcacca ggtactgaag tgactagact 1200
 gtcagcagag gatgcagatg cccccggctc ccccaattcc cacgttgtgt 1250

atcagctcct gagccctgag cctgaggatg gggtagaggg gagagccttc 1300
 caggtggacc ccacttcagg cagtgtgacg ctgggggtgc tcccactccg 1350
 agcaggccag aacatcctgc ttctgggtgct ggccatggac ctggcaggcg 1400
 cagaggggtgg cttcagcagc acgtgtgaag tcgaagtcgc agtcacagat 1450
 atcaatgatc acgcccctga gttcatcact tcccagattg ggcctataag 1500
 cctccctgag gatgtggagc cggggactct ggtggccatg ctaacagcca 1550
 ttgatgctga cctcgagccc gccttcgcgc tcatggattt tgccattgag 1600
 aggggagaca cagaaggagc ttttggcctg gattgggagc cagactctgg 1650
 gcatgttaga ctcagactct gcaagaacct cagttatgag gcagctccaa 1700
 gtcatgaggt ggtgggtggtg gtgcagagtg tggcgaagct ggtggggcca 1750
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 agaccatggc ttgatcgtga gtggaccag caaggacccc gatctggcca 2150
 gtgggcacgg tccctacagc ttcacccttg gtcccaaccc cacggtgcaa 2200
 cgggattggc gcctccagac tctcaatggt tcccatgcct acctcacctt 2250
 ggccctgcat tgggtggagc cacgtgaaca cataatcccc gtggtggtca 2300
 gccacaatgc ccagatgtgg cagctcctgg ttcgagtgat cgtgtgtcgc 2350
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 aatggcccag gcagctctag ctgggagctt ggcctctggc tccatctgag 2600
 tcccctggga gagagcccag caccgaagat ccagcagggg acaggacaga 2650

gtagaagccc ctccatctgc cctgggggtgg aggcaccatc accatcacca 2700
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 gctccaaatg tcagggtgtt tgcccaataa taaagcccca gagaactggg 2800
 ctggggcccta tgggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaag 2848

<210> 98
 <211> 807
 <212> PRT
 <213> Homo Sapien

<400> 98
 Met Val Pro Ala Trp Leu Trp Leu Leu Cys Val Ser Val Pro Gln
 1 5 10 15
 Ala Leu Pro Lys Ala Gln Pro Ala Glu Leu Ser Val Glu Val Pro
 20 25 30
 Glu Asn Tyr Gly Gly Asn Phe Pro Leu Tyr Leu Thr Lys Leu Pro
 35 40 45
 Leu Pro Arg Glu Gly Ala Glu Gly Gln Ile Val Leu Ser Gly Asp
 50 55 60
 Ser Gly Lys Ala Thr Glu Gly Pro Phe Ala Met Asp Pro Asp Ser
 65 70 75
 Gly Phe Leu Leu Val Thr Arg Ala Leu Asp Arg Glu Glu Gln Ala
 80 85 90
 Glu Tyr Gln Leu Gln Val Thr Leu Glu Met Gln Asp Gly His Val
 95 100 105
 Leu Trp Gly Pro Gln Pro Val Leu Val His Val Lys Asp Glu Asn
 110 115 120
 Asp Gln Val Pro His Phe Ser Gln Ala Ile Tyr Arg Ala Arg Leu
 125 130 135
 Ser Arg Gly Thr Arg Pro Gly Ile Pro Phe Leu Phe Leu Glu Ala
 140 145 150
 Ser Asp Arg Asp Glu Pro Gly Thr Ala Asn Ser Asp Leu Arg Phe
 155 160 165
 His Ile Leu Ser Gln Ala Pro Ala Gln Pro Ser Pro Asp Met Phe
 170 175 180
 Gln Leu Glu Pro Arg Leu Gly Ala Leu Ala Leu Ser Pro Lys Gly
 185 190 195
 Ser Thr Ser Leu Asp His Ala Leu Glu Arg Thr Tyr Gln Leu Leu
 200 205 210
 Val Gln Val Lys Asp Met Gly Asp Gln Ala Ser Gly His Gln Ala

				215					220					225
Thr	Ala	Thr	Val	Glu	Val	Ser	Ile	Ile	Glu	Ser	Thr	Trp	Val	Ser
				230					235					240
Leu	Glu	Pro	Ile	His	Leu	Ala	Glu	Asn	Leu	Lys	Val	Leu	Tyr	Pro
				245					250					255
His	His	Met	Ala	Gln	Val	His	Trp	Ser	Gly	Gly	Asp	Val	His	Tyr
				260					265					270
His	Leu	Glu	Ser	His	Pro	Pro	Gly	Pro	Phe	Glu	Val	Asn	Ala	Glu
				275					280					285
Gly	Asn	Leu	Tyr	Val	Thr	Arg	Glu	Leu	Asp	Arg	Glu	Ala	Gln	Ala
				290					295					300
Glu	Tyr	Leu	Leu	Gln	Val	Arg	Ala	Gln	Asn	Ser	His	Gly	Glu	Asp
				305					310					315
Tyr	Ala	Ala	Pro	Leu	Glu	Leu	His	Val	Leu	Val	Met	Asp	Glu	Asn
				320					325					330
Asp	Asn	Val	Pro	Ile	Cys	Pro	Pro	Arg	Asp	Pro	Thr	Val	Ser	Ile
				335					340					345
Pro	Glu	Leu	Ser	Pro	Pro	Gly	Thr	Glu	Val	Thr	Arg	Leu	Ser	Ala
				350					355					360
Glu	Asp	Ala	Asp	Ala	Pro	Gly	Ser	Pro	Asn	Ser	His	Val	Val	Tyr
				365					370					375
Gln	Leu	Leu	Ser	Pro	Glu	Pro	Glu	Asp	Gly	Val	Glu	Gly	Arg	Ala
				380					385					390
Phe	Gln	Val	Asp	Pro	Thr	Ser	Gly	Ser	Val	Thr	Leu	Gly	Val	Leu
				395					400					405
Pro	Leu	Arg	Ala	Gly	Gln	Asn	Ile	Leu	Leu	Leu	Val	Leu	Ala	Met
				410					415					420
Asp	Leu	Ala	Gly	Ala	Glu	Gly	Gly	Phe	Ser	Ser	Thr	Cys	Glu	Val
				425					430					435
Glu	Val	Ala	Val	Thr	Asp	Ile	Asn	Asp	His	Ala	Pro	Glu	Phe	Ile
				440					445					450
Thr	Ser	Gln	Ile	Gly	Pro	Ile	Ser	Leu	Pro	Glu	Asp	Val	Glu	Pro
				455					460					465
Gly	Thr	Leu	Val	Ala	Met	Leu	Thr	Ala	Ile	Asp	Ala	Asp	Leu	Glu
				470					475					480
Pro	Ala	Phe	Arg	Leu	Met	Asp	Phe	Ala	Ile	Glu	Arg	Gly	Asp	Thr
				485					490					495
Glu	Gly	Thr	Phe	Gly	Leu	Asp	Trp	Glu	Pro	Asp	Ser	Gly	His	Val

				500					505					510
Arg	Leu	Arg	Leu	Cys	Lys	Asn	Leu	Ser	Tyr	Glu	Ala	Ala	Pro	Ser
				515					520					525
His	Glu	Val	Val	Val	Val	Val	Gln	Ser	Val	Ala	Lys	Leu	Val	Gly
				530					535					540
Pro	Gly	Pro	Gly	Pro	Gly	Ala	Thr	Ala	Thr	Val	Thr	Val	Leu	Val
				545					550					555
Glu	Arg	Val	Met	Pro	Pro	Pro	Lys	Leu	Asp	Gln	Glu	Ser	Tyr	Glu
				560					565					570
Ala	Ser	Val	Pro	Ile	Ser	Ala	Pro	Ala	Gly	Ser	Phe	Leu	Leu	Thr
				575					580					585
Ile	Gln	Pro	Ser	Asp	Pro	Ile	Ser	Arg	Thr	Leu	Arg	Phe	Ser	Leu
				590					595					600
Val	Asn	Asp	Ser	Glu	Gly	Trp	Leu	Cys	Ile	Glu	Lys	Phe	Ser	Gly
				605					610					615
Glu	Val	His	Thr	Ala	Gln	Ser	Leu	Gln	Gly	Ala	Gln	Pro	Gly	Asp
				620					625					630
Thr	Tyr	Thr	Val	Leu	Val	Glu	Ala	Gln	Asp	Thr	Ala	Leu	Thr	Leu
				635					640					645
Ala	Pro	Val	Pro	Ser	Gln	Tyr	Leu	Cys	Thr	Pro	Arg	Gln	Asp	His
				650					655					660
Gly	Leu	Ile	Val	Ser	Gly	Pro	Ser	Lys	Asp	Pro	Asp	Leu	Ala	Ser
				665					670					675
Gly	His	Gly	Pro	Tyr	Ser	Phe	Thr	Leu	Gly	Pro	Asn	Pro	Thr	Val
				680					685					690
Gln	Arg	Asp	Trp	Arg	Leu	Gln	Thr	Leu	Asn	Gly	Ser	His	Ala	Tyr
				695					700					705
Leu	Thr	Leu	Ala	Leu	His	Trp	Val	Glu	Pro	Arg	Glu	His	Ile	Ile
				710					715					720
Pro	Val	Val	Val	Ser	His	Asn	Ala	Gln	Met	Trp	Gln	Leu	Leu	Val
				725					730					735
Arg	Val	Ile	Val	Cys	Arg	Cys	Asn	Val	Glu	Gly	Gln	Cys	Met	Arg
				740					745					750
Lys	Val	Gly	Arg	Met	Lys	Gly	Met	Pro	Thr	Lys	Leu	Ser	Ala	Val
				755					760					765
Gly	Ile	Leu	Val	Gly	Thr	Leu	Val	Ala	Ile	Gly	Ile	Phe	Leu	Ile
				770					775					780
Leu	Ile	Phe	Thr	His	Trp	Thr	Met	Ser	Arg	Lys	Lys	Asp	Pro	Asp

785

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795

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<211> 2436

<212> DNA

<213> Homo Sapien

<400> 99

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 <212> PRT
 <213> Homo Sapien

<400> 100

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				470					475					480	
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				500					505					510	
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				515					520					525	
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				530					535					540	
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<211> 1728

<212> DNA

<213> Homo Sapien

<400> 101

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<211> 414

<212> PRT

<213> Homo Sapien

<400> 102

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				20					25					30
Gln	Asp	Ser	Lys	Ser	Phe	Gly	Ile	Met	Val	Ser	Trp	Lys	Gly	Ile
				35					40					45
Tyr	Phe	Ile	Leu	Thr	Leu	Phe	Trp	Gly	Ser	Phe	Phe	Gly	Ser	Ile
				50					55					60
Phe	Met	Leu	Ser	Pro	Phe	Leu	Pro	Leu	Met	Phe	Val	Asn	Pro	Ser
				65					70					75
Trp	Tyr	Arg	Trp	Ile	Asn	Asn	Arg	Leu	Val	Ala	Thr	Trp	Leu	Thr
				80					85					90
Leu	Pro	Val	Ala	Leu	Leu	Glu	Thr	Met	Phe	Gly	Val	Lys	Val	Ile
				95					100					105
Ile	Thr	Gly	Asp	Ala	Phe	Val	Pro	Gly	Glu	Arg	Ser	Val	Ile	Ile
				110					115					120
Met	Asn	His	Arg	Thr	Arg	Met	Asp	Trp	Met	Phe	Leu	Trp	Asn	Cys
				125					130					135

Leu Met Arg Tyr	Ser Tyr Leu Arg Leu	Glu Lys Ile Cys Leu Lys	140	145	150
Ala Ser Leu Lys	Gly Val Pro Gly Phe	Gly Trp Ala Met Gln Ala	155	160	165
Ala Ala Tyr Ile	Phe Ile His Arg Lys	Trp Lys Asp Asp Lys Ser	170	175	180
His Phe Glu Asp	Met Ile Asp Tyr Phe	Cys Asp Ile His Glu Pro	185	190	195
Leu Gln Leu Leu	Ile Phe Pro Glu Gly	Thr Asp Leu Thr Glu Asn	200	205	210
Ser Lys Ser Arg	Ser Asn Ala Phe Ala	Glu Lys Asn Gly Leu Gln	215	220	225
Lys Tyr Glu Tyr	Val Leu His Pro Arg	Thr Thr Gly Phe Thr Phe	230	235	240
Val Val Asp Arg	Leu Arg Glu Gly Lys	Asn Leu Asp Ala Val His	245	250	255
Asp Ile Thr Val	Ala Tyr Pro His Asn	Ile Pro Gln Ser Glu Lys	260	265	270
His Leu Leu Gln	Gly Asp Phe Pro Arg	Glu Ile His Phe His Val	275	280	285
His Arg Tyr Pro	Ile Asp Thr Leu Pro	Thr Ser Lys Glu Asp Leu	290	295	300
Gln Leu Trp Cys	His Lys Arg Trp Glu	Glu Lys Glu Glu Arg Leu	305	310	315
Arg Ser Phe Tyr	Gln Gly Glu Lys Asn	Phe Tyr Phe Thr Gly Gln	320	325	330
Ser Val Ile Pro	Pro Cys Lys Ser Glu	Leu Arg Val Leu Val Val	335	340	345
Lys Leu Leu Ser	Ile Leu Tyr Trp Thr	Leu Phe Ser Pro Ala Met	350	355	360
Cys Leu Leu Ile	Tyr Leu Tyr Ser Leu	Val Lys Trp Tyr Phe Ile	365	370	375
Ile Thr Ile Val	Ile Phe Val Leu Gln	Glu Arg Ile Phe Gly Gly	380	385	390
Leu Glu Ile Ile	Glu Leu Ala Cys Tyr	Arg Leu Leu His Lys Gln	395	400	405
Pro His Leu Asn	Ser Lys Lys Asn Glu		410		

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<211> 466

<212> PRT

<213> Homo Sapien

<400> 104

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Leu	Val	Gly	Glu	Asp	Ala	Val	Phe	Ser	Cys	Ser	Leu	Phe	Pro	Glu					
				35					40					45					
Thr	Ser	Ala	Glu	Ala	Met	Glu	Val	Arg	Phe	Phe	Arg	Asn	Gln	Phe					
				50					55					60					
His	Ala	Val	Val	His	Leu	Tyr	Arg	Asp	Gly	Glu	Asp	Trp	Glu	Ser					
				65					70					75					
Lys	Gln	Met	Pro	Gln	Tyr	Arg	Gly	Arg	Thr	Glu	Phe	Val	Lys	Asp					
				80					85					90					
Ser	Ile	Ala	Gly	Gly	Arg	Val	Ser	Leu	Arg	Leu	Lys	Asn	Ile	Thr					
				95					100					105					
Pro	Ser	Asp	Ile	Gly	Leu	Tyr	Gly	Cys	Trp	Phe	Ser	Ser	Gln	Ile					
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Tyr	Asp	Glu	Glu	Ala	Thr	Trp	Glu	Leu	Arg	Val	Ala	Ala	Leu	Gly					
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Ser	Leu	Pro	Leu	Ile	Ser	Ile	Val	Gly	Tyr	Val	Asp	Gly	Gly	Ile					
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Gln	Leu	Leu	Cys	Leu	Ser	Ser	Gly	Trp	Phe	Pro	Gln	Pro	Thr	Ala					
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Lys	Trp	Lys	Gly	Pro	Gln	Gly	Gln	Asp	Leu	Ser	Ser	Asp	Ser	Arg					
				170					175					180					
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Ala	Glu	Gln	Ser	His	Glu	Val	Glu	Ser	Lys	Val	Leu	Ile	Gly	Glu					
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Thr	Phe	Phe	Gln	Pro	Ser	Pro	Trp	Arg	Leu	Ala	Ser	Ile	Leu	Leu					
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Val Ala Ser Gln	Gly Phe Gln Ala Gly	Arg His Tyr Trp Glu	Val		
	335		340		345
Asp Val Gly Gln	Asn Val Gly Trp Tyr	Val Gly Val Cys Arg	Asp		
	350		355		360
Asp Val Asp Arg	Gly Lys Asn Asn Val	Thr Leu Ser Pro Asn	Asn		
	365		370		375
Gly Tyr Trp Val	Leu Arg Leu Thr Thr	Glu His Leu Tyr Phe	Thr		
	380		385		390
Phe Asn Pro His	Phe Ile Ser Leu Pro	Pro Ser Thr Pro Pro	Thr		
	395		400		405
Arg Val Gly Val	Phe Leu Asp Tyr Glu	Gly Gly Thr Ile Ser	Phe		
	410		415		420
Phe Asn Thr Asn	Asp Gln Ser Leu Ile	Tyr Thr Leu Leu Thr	Cys		
	425		430		435
Gln Phe Glu Gly	Leu Leu Arg Pro Tyr	Ile Gln His Ala Met	Tyr		
	440		445		450
Asp Glu Glu Lys	Gly Thr Pro Ile Phe	Ile Cys Pro Val Ser	Trp		
	455		460		465

Gly

<210> 105
 <211> 2103
 <212> DNA
 <213> Homo Sapien

<400> 105
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 gtcattcttca taccctgat tgtcctggca gtgtgcattg gactcactgt 150
 tcattatgtg agatataatc aaaagaagac ctacaattac tatagcacat 200
 tgtcatttac aactgacaaa ctatatgctg agtttggcag agaggcttct 250
 aacaatttta cagaaatgag ccagagactt gaatcaatgg tgaaaaatgc 300
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 agttcagtca acagaagcat ggagtgttgg ctcatatgct gttgatttgt 400
 agatttcact ctactgagga tcctgaaact gtagataaaa ttgttcaact 450

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 ctactcagc taaaattaaa aaaatcaaca agacagaaac agacagctat 550
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 aacggggtct ccggagaata attgtccatg aaaaatacaa acacccatca 850
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 aaatgcagta catagagttt gtctccctga tgcactctat gagtttcaac 950
 caggatgatg gatgtttgtg acaggatttg gagcactgaa aaatgatggg 1000
 tacagtcaaa atcatcttcg acaagcacag gtgactctca tagacgctac 1050
 aacttgcaat gaacctcaag cttacaatga cgccataact cctagaatgt 1100
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 aataccaatc acttcatcat ttaggaagta tgggaactaa gttaaggaag 1900

tccagaaaga agccaagata tatccttatt ttcatttcca aacaactact 1950
atgataaatg tgaagaagat tctgtttttt tgtgacctat aataattata 2000
caaacttcat gcaatgtact tggtctaagc aaattaaagc aaatatttat 2050
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cca 2103

<210> 106
<211> 423
<212> PRT
<213> Homo Sapien

<400> 106
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Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr
35 40 45
Asn Gln Lys Lys Thr Tyr Asn Tyr Tyr Ser Thr Leu Ser Phe Thr
50 55 60
Thr Asp Lys Leu Tyr Ala Glu Phe Gly Arg Glu Ala Ser Asn Asn
65 70 75
Phe Thr Glu Met Ser Gln Arg Leu Glu Ser Met Val Lys Asn Ala
80 85 90
Phe Tyr Lys Ser Pro Leu Arg Glu Glu Phe Val Lys Ser Gln Val
95 100 105
Ile Lys Phe Ser Gln Gln Lys His Gly Val Leu Ala His Met Leu
110 115 120
Leu Ile Cys Arg Phe His Ser Thr Glu Asp Pro Glu Thr Val Asp
125 130 135
Lys Ile Val Gln Leu Val Leu His Glu Lys Leu Gln Asp Ala Val
140 145 150
Gly Pro Pro Lys Val Asp Pro His Ser Val Lys Ile Lys Lys Ile
155 160 165
Asn Lys Thr Glu Thr Asp Ser Tyr Leu Asn His Cys Cys Gly Thr
170 175 180
Arg Arg Ser Lys Thr Leu Gly Gln Ser Leu Arg Ile Val Gly Gly
185 190 195
Thr Glu Val Glu Glu Gly Glu Trp Pro Trp Gln Ala Ser Leu Gln

200					205					210				
Trp	Asp	Gly	Ser	His	Arg	Cys	Gly	Ala	Thr	Leu	Ile	Asn	Ala	Thr
				215					220					225
Trp	Leu	Val	Ser	Ala	Ala	His	Cys	Phe	Thr	Thr	Tyr	Lys	Asn	Pro
				230					235					240
Ala	Arg	Trp	Thr	Ala	Ser	Phe	Gly	Val	Thr	Ile	Lys	Pro	Ser	Lys
				245					250					255
Met	Lys	Arg	Gly	Leu	Arg	Arg	Ile	Ile	Val	His	Glu	Lys	Tyr	Lys
				260					265					270
His	Pro	Ser	His	Asp	Tyr	Asp	Ile	Ser	Leu	Ala	Glu	Leu	Ser	Ser
				275					280					285
Pro	Val	Pro	Tyr	Thr	Asn	Ala	Val	His	Arg	Val	Cys	Leu	Pro	Asp
				290					295					300
Ala	Ser	Tyr	Glu	Phe	Gln	Pro	Gly	Asp	Val	Met	Phe	Val	Thr	Gly
				305					310					315
Phe	Gly	Ala	Leu	Lys	Asn	Asp	Gly	Tyr	Ser	Gln	Asn	His	Leu	Arg
				320					325					330
Gln	Ala	Gln	Val	Thr	Leu	Ile	Asp	Ala	Thr	Thr	Cys	Asn	Glu	Pro
				335					340					345
Gln	Ala	Tyr	Asn	Asp	Ala	Ile	Thr	Pro	Arg	Met	Leu	Cys	Ala	Gly
				350					355					360
Ser	Leu	Glu	Gly	Lys	Thr	Asp	Ala	Cys	Gln	Gly	Asp	Ser	Gly	Gly
				365					370					375
Pro	Leu	Val	Ser	Ser	Asp	Ala	Arg	Asp	Ile	Trp	Tyr	Leu	Ala	Gly
				380					385					390
Ile	Val	Ser	Trp	Gly	Asp	Glu	Cys	Ala	Lys	Pro	Asn	Lys	Pro	Gly
				395					400					405
Val	Tyr	Thr	Arg	Val	Thr	Ala	Leu	Arg	Asp	Trp	Ile	Thr	Ser	Lys
				410					415					420

Thr Gly Ile

<210> 107

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 107

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 tgcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200
 gctcacaatg gccagagaag attccgtgaa gtgtctgcgc tgccctgctct 250
 acgccctcaa tctgctcttt tggttaatgt ccatcagtgt gttggcagtt 300
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 aacgagggta gaggaagcag tcattttgac ttactttcct gtggttcac 400
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 atgaacagga acttatgggt ccagtaaat ggtcagatat ggtcactttg 600
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cacagattat taaatttttt tacaagagta tagtatattt atttgaaatg 2300
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<210> 108

<211> 305

<212> PRT

<213> Homo Sapien

<400> 108

Met	Ala	Arg	Glu	Asp	Ser	Val	Lys	Cys	Leu	Arg	Cys	Leu	Leu	Tyr
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Ala	Leu	Asn	Leu	Leu	Phe	Trp	Leu	Met	Ser	Ile	Ser	Val	Leu	Ala
			20						25					30
Val	Ser	Ala	Trp	Met	Arg	Asp	Tyr	Leu	Asn	Asn	Val	Leu	Thr	Leu
			35						40					45
Thr	Ala	Glu	Thr	Arg	Val	Glu	Glu	Ala	Val	Ile	Leu	Thr	Tyr	Phe
			50						55					60
Pro	Val	Val	His	Pro	Val	Met	Ile	Ala	Val	Cys	Cys	Phe	Leu	Ile
			65						70					75
Ile	Val	Gly	Met	Leu	Gly	Tyr	Cys	Gly	Thr	Val	Lys	Arg	Asn	Leu
			80						85					90

Leu	Leu	Leu	Ala	Trp	Tyr	Phe	Gly	Ser	Leu	Leu	Val	Ile	Phe	Cys	
				95					100					105	
Val	Glu	Leu	Ala	Cys	Gly	Val	Trp	Thr	Tyr	Glu	Gln	Glu	Leu	Met	
				110					115					120	
Val	Pro	Val	Gln	Trp	Ser	Asp	Met	Val	Thr	Leu	Lys	Ala	Arg	Met	
				125					130					135	
Thr	Asn	Tyr	Gly	Leu	Pro	Arg	Tyr	Arg	Trp	Leu	Thr	His	Ala	Trp	
				140					145					150	
Asn	Phe	Phe	Gln	Arg	Glu	Phe	Lys	Cys	Cys	Gly	Val	Val	Tyr	Phe	
				155					160					165	
Thr	Asp	Trp	Leu	Glu	Met	Thr	Glu	Met	Asp	Trp	Pro	Pro	Asp	Ser	
				170					175					180	
Cys	Cys	Val	Arg	Glu	Phe	Pro	Gly	Cys	Ser	Lys	Gln	Ala	His	Gln	
				185					190					195	
Glu	Asp	Leu	Ser	Asp	Leu	Tyr	Gln	Glu	Gly	Cys	Gly	Lys	Lys	Met	
				200					205					210	
Tyr	Ser	Phe	Leu	Arg	Gly	Thr	Lys	Gln	Leu	Gln	Val	Leu	Arg	Phe	
				215					220					225	
Leu	Gly	Ile	Ser	Ile	Gly	Val	Thr	Gln	Ile	Leu	Ala	Met	Ile	Leu	
				230					235					240	
Thr	Ile	Thr	Leu	Leu	Trp	Ala	Leu	Tyr	Tyr	Asp	Arg	Arg	Glu	Pro	
				245					250					255	
Gly	Thr	Asp	Gln	Met	Met	Ser	Leu	Lys	Asn	Asp	Asn	Ser	Gln	His	
				260					265					270	
Leu	Ser	Cys	Pro	Ser	Val	Glu	Leu	Leu	Lys	Pro	Ser	Leu	Ser	Arg	
				275					280					285	
Ile	Phe	Glu	His	Thr	Ser	Met	Ala	Asn	Ser	Phe	Asn	Thr	His	Phe	
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Glu	Met	Glu	Glu	Leu											
				305											

<210> 109

<211> 2339

<212> DNA

<213> Homo Sapien

<400> 109

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gaggccttaa aaaaaaaagt gcttgaaaga gaaggggaca aaggaacacc 150

agtattaaga ggattttcca gtgtttctgg cagttggtcc agaaggatgc 200
 ctccattcct gcttctcacc tgctcttca tcacaggcac ctccgtgtca 250
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 acaaccatgt gaatggggag tgggtaccact tcacgggcat ggcgaggat 400
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 aacagttact gaaattatga cttaaatacc caatgactcc ttaaatatgt 2250
 aaattatagt tataccttga aatttcaatt caaatgcaga ctaattatag 2300
 ggaatttgga agtgtatcaa taaaacagta tataatttt 2339

<210> 110

<211> 545

<212> PRT

<213> Homo Sapien

<400> 110

Met	Pro	Pro	Phe	Leu	Leu	Leu	Thr	Cys	Leu	Phe	Ile	Thr	Gly	Thr
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Ser	Val	Ser	Pro	Val	Ala	Leu	Asp	Pro	Cys	Ser	Ala	Tyr	Ile	Ser
				20					25					30
Leu	Asn	Glu	Pro	Trp	Arg	Asn	Thr	Asp	His	Gln	Leu	Asp	Glu	Ser
				35					40					45
Gln	Gly	Pro	Pro	Leu	Cys	Asp	Asn	His	Val	Asn	Gly	Glu	Trp	Tyr
				50					55					60
His	Phe	Thr	Gly	Met	Ala	Gly	Asp	Ala	Met	Pro	Thr	Phe	Cys	Ile
				65					70					75
Pro	Glu	Asn	His	Cys	Gly	Thr	His	Ala	Pro	Val	Trp	Leu	Asn	Gly
				80					85					90
Ser	His	Pro	Leu	Glu	Gly	Asp	Gly	Ile	Val	Gln	Arg	Gln	Ala	Cys
				95					100					105

Ala	Ser	Phe	Asn	Gly	Asn	Cys	Cys	Leu	Trp	Asn	Thr	Thr	Val	Glu	110	115	120
Val	Lys	Ala	Cys	Pro	Gly	Gly	Tyr	Tyr	Val	Tyr	Arg	Leu	Thr	Lys	125	130	135
Pro	Ser	Val	Cys	Phe	His	Val	Tyr	Cys	Gly	His	Phe	Tyr	Asp	Ile	140	145	150
Cys	Asp	Glu	Asp	Cys	His	Gly	Ser	Cys	Ser	Asp	Thr	Ser	Glu	Cys	155	160	165
Thr	Cys	Ala	Pro	Gly	Thr	Val	Leu	Gly	Pro	Asp	Arg	Gln	Thr	Cys	170	175	180
Phe	Asp	Glu	Asn	Glu	Cys	Glu	Gln	Asn	Asn	Gly	Gly	Cys	Ser	Glu	185	190	195
Ile	Cys	Val	Asn	Leu	Lys	Asn	Ser	Tyr	Arg	Cys	Glu	Cys	Gly	Val	200	205	210
Gly	Arg	Val	Leu	Arg	Ser	Asp	Gly	Lys	Thr	Cys	Glu	Asp	Val	Glu	215	220	225
Gly	Cys	His	Asn	Asn	Asn	Gly	Gly	Cys	Ser	His	Ser	Cys	Leu	Gly	230	235	240
Ser	Glu	Lys	Gly	Tyr	Gln	Cys	Glu	Cys	Pro	Arg	Gly	Leu	Val	Leu	245	250	255
Ser	Glu	Asp	Asn	His	Thr	Cys	Gln	Val	Pro	Val	Leu	Cys	Lys	Ser	260	265	270
Asn	Ala	Ile	Glu	Val	Asn	Ile	Pro	Arg	Glu	Leu	Val	Gly	Gly	Leu	275	280	285
Glu	Leu	Phe	Leu	Thr	Asn	Thr	Ser	Cys	Arg	Gly	Val	Ser	Asn	Gly	290	295	300
Thr	His	Val	Asn	Ile	Leu	Phe	Ser	Leu	Lys	Thr	Cys	Gly	Thr	Val	305	310	315
Val	Asp	Val	Val	Asn	Asp	Lys	Ile	Val	Ala	Ser	Asn	Leu	Val	Thr	320	325	330
Gly	Leu	Pro	Lys	Gln	Thr	Pro	Gly	Ser	Ser	Gly	Asp	Phe	Ile	Ile	335	340	345
Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Val	Thr	Cys	Glu	Phe	Pro	Arg	350	355	360
Leu	Tyr	Thr	Ile	Ser	Glu	Gly	Tyr	Val	Pro	Asn	Leu	Arg	Asn	Ser	365	370	375
Pro	Leu	Glu	Ile	Met	Ser	Arg	Asn	His	Gly	Ile	Phe	Pro	Phe	Thr	380	385	390

Leu	Glu	Ile	Phe	Lys	Asp	Asn	Glu	Phe	Glu	Glu	Pro	Tyr	Arg	Glu	
				395					400					405	
Ala	Leu	Pro	Thr	Leu	Lys	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Gly	Ile	
				410					415					420	
Glu	Pro	Val	Val	His	Val	Ser	Gly	Leu	Glu	Ser	Leu	Val	Glu	Ser	
				425					430					435	
Cys	Phe	Ala	Thr	Pro	Thr	Ser	Lys	Ile	Asp	Glu	Val	Leu	Lys	Tyr	
				440					445					450	
Tyr	Leu	Ile	Arg	Asp	Gly	Cys	Val	Ser	Asp	Asp	Ser	Val	Lys	Gln	
				455					460					465	
Tyr	Thr	Ser	Arg	Asp	His	Leu	Ala	Lys	His	Phe	Gln	Val	Pro	Val	
				470					475					480	
Phe	Lys	Phe	Val	Gly	Lys	Asp	His	Lys	Glu	Val	Phe	Leu	His	Cys	
				485					490					495	
Arg	Val	Leu	Val	Cys	Gly	Val	Leu	Asp	Glu	Arg	Ser	Arg	Cys	Ala	
				500					505					510	
Gln	Gly	Cys	His	Arg	Arg	Met	Arg	Arg	Gly	Ala	Gly	Gly	Glu	Asp	
				515					520					525	
Ser	Ala	Gly	Leu	Gln	Gly	Gln	Thr	Leu	Thr	Gly	Gly	Pro	Ile	Arg	
				530					535					540	
Ile	Asp	Trp	Glu	Asp											
				545											

<210> 111
 <211> 2063
 <212> DNA
 <213> Homo Sapien

<400> 111
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 cttgggggtga caatctcagc tccaggctac agggagaccg ggaggatcac 200
 agagccagca tgttacagga tcctgacagt gatcaacctc tgaacagcct 250
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 aggtggggat ccccatcatc atagcactac tgagcctggc gagtatcatc 350
 attgtggttg tcctcatcaa ggtgattctg gataaatact acttcctctg 400
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<210> 112
<211> 432
<212> PRT
<213> Homo Sapien

<400> 112

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Val	Lys	Pro	Leu	Arg	Lys	Pro	Arg	Ile	Pro	Met	Glu	Thr	Phe	Arg	20	25	30	
Lys	Val	Gly	Ile	Pro	Ile	Ile	Ile	Ala	Leu	Leu	Ser	Leu	Ala	Ser	35	40	45	
Ile	Ile	Ile	Val	Val	Val	Leu	Ile	Lys	Val	Ile	Leu	Asp	Lys	Tyr	50	55	60	
Tyr	Phe	Leu	Cys	Gly	Gln	Pro	Leu	His	Phe	Ile	Pro	Arg	Lys	Gln	65	70	75	
Leu	Cys	Asp	Gly	Glu	Leu	Asp	Cys	Pro	Leu	Gly	Glu	Asp	Glu	Glu	80	85	90	
His	Cys	Val	Lys	Ser	Phe	Pro	Glu	Gly	Pro	Ala	Val	Ala	Val	Arg	95	100	105	
Leu	Ser	Lys	Asp	Arg	Ser	Thr	Leu	Gln	Val	Leu	Asp	Ser	Ala	Thr	110	115	120	
Gly	Asn	Trp	Phe	Ser	Ala	Cys	Phe	Asp	Asn	Phe	Thr	Glu	Ala	Leu	125	130	135	
Ala	Glu	Thr	Ala	Cys	Arg	Gln	Met	Gly	Tyr	Ser	Arg	Ala	Val	Glu	140	145	150	
Ile	Gly	Pro	Asp	Gln	Asp	Leu	Asp	Val	Val	Glu	Ile	Thr	Glu	Asn	155	160	165	
Ser	Gln	Glu	Leu	Arg	Met	Arg	Asn	Ser	Ser	Gly	Pro	Cys	Leu	Ser	170	175	180	
Gly	Ser	Leu	Val	Ser	Leu	His	Cys	Leu	Ala	Cys	Gly	Lys	Ser	Leu	185	190	195	
Lys	Thr	Pro	Arg	Val	Val	Gly	Gly	Glu	Glu	Ala	Ser	Val	Asp	Ser	200	205	210	

Trp	Pro	Trp	Gln	Val	Ser	Ile	Gln	Tyr	Asp	Lys	Gln	His	Val	Cys	215	220	225
Gly	Gly	Ser	Ile	Leu	Asp	Pro	His	Trp	Val	Leu	Thr	Ala	Ala	His	230	235	240
Cys	Phe	Arg	Lys	His	Thr	Asp	Val	Phe	Asn	Trp	Lys	Val	Arg	Ala	245	250	255
Gly	Ser	Asp	Lys	Leu	Gly	Ser	Phe	Pro	Ser	Leu	Ala	Val	Ala	Lys	260	265	270
Ile	Ile	Ile	Ile	Glu	Phe	Asn	Pro	Met	Tyr	Pro	Lys	Asp	Asn	Asp	275	280	285
Ile	Ala	Leu	Met	Lys	Leu	Gln	Phe	Pro	Leu	Thr	Phe	Ser	Gly	Thr	290	295	300
Val	Arg	Pro	Ile	Cys	Leu	Pro	Phe	Phe	Asp	Glu	Glu	Leu	Thr	Pro	305	310	315
Ala	Thr	Pro	Leu	Trp	Ile	Ile	Gly	Trp	Gly	Phe	Thr	Lys	Gln	Asn	320	325	330
Gly	Gly	Lys	Met	Ser	Asp	Ile	Leu	Leu	Gln	Ala	Ser	Val	Gln	Val	335	340	345
Ile	Asp	Ser	Thr	Arg	Cys	Asn	Ala	Asp	Asp	Ala	Tyr	Gln	Gly	Glu	350	355	360
Val	Thr	Glu	Lys	Met	Met	Cys	Ala	Gly	Ile	Pro	Glu	Gly	Gly	Val	365	370	375
Asp	Thr	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Met	Tyr	Gln	Ser	380	385	390
Asp	Gln	Trp	His	Val	Val	Gly	Ile	Val	Ser	Trp	Gly	Tyr	Gly	Cys	395	400	405
Gly	Gly	Pro	Ser	Thr	Pro	Gly	Val	Tyr	Thr	Lys	Val	Ser	Ala	Tyr	410	415	420
Leu	Asn	Trp	Ile	Tyr	Asn	Val	Trp	Lys	Ala	Glu	Leu				425	430	

<210> 113

<211> 1768

<212> DNA

<213> Homo Sapien

<400> 113

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tatgctgtgg tggctagtgc tcctactcct acctacatta aaatctgttt 200
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 ctgtggctct ggcctaaacc tgaccttcac tctggaacga gaacagaggt 300
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 actcgggcag tgcaggtagc tgagcctctt ggtagctgcg gctttcaagg 450
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 ccctggggcc aggacgggcc gtggacacct gctcagaagc agtgggtgag 600
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<210> 114
<211> 109
<212> PRT
<213> Homo Sapien

<400> 114
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20 25 30
Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
35 40 45
Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
50 55 60
Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
65 70 75
Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
80 85 90
Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
95 100 105
Arg Arg Arg Asp .

<210> 115
<211> 1197
<212> DNA
<213> Homo Sapien

<400> 115
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ttgtggactg gtgtttggta tcctggccct aactctaatt gtcctgtttt 200
gggggagcaa gcacttctgg ccggaggtac ccaaaaaagc ctatgacatg 250
gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
tgatcctgtg accagaactg aaatattcag aagcggaaat ggactgatg 350

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atcttctgaa ccagaagagg aaatagatga gaatgaagaa attaccacaa 500
ctttctttga acagtcagtg atttgggtcc cagcagaaaa gcctattgaa 550
aaccgagatt ttcttaaaaa ttccaaaatt ctggagattt gtgataacgt 600
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<210> 116

<211> 317

<212> PRT

<213> Homo Sapien

<400> 116

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Met Ala Lys Asn Pro Pro Glu Asn Cys Glu Asp Cys His Ile Leu
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Asn Ala Glu Ala Phe Lys Ser Lys Lys Ile Cys Lys Ser Leu Lys
                20                      25                      30

Ile Cys Gly Leu Val Phe Gly Ile Leu Ala Leu Thr Leu Ile Val
                35                      40                      45

Leu Phe Trp Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys
                50                      55                      60

Ala Tyr Asp Met Glu His Thr Phe Tyr Ser Asn Gly Glu Lys Lys
                65                      70                      75

Lys Ile Tyr Met Glu Ile Asp Pro Val Thr Arg Thr Glu Ile Phe

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80					85					90				
Arg	Ser	Gly	Asn	Gly	Thr	Asp	Glu	Thr	Leu	Glu	Val	His	Asp	Phe
				95					100					105
Lys	Asn	Gly	Tyr	Thr	Gly	Ile	Tyr	Phe	Val	Gly	Leu	Gln	Lys	Cys
				110					115					120
Phe	Ile	Lys	Thr	Gln	Ile	Lys	Val	Ile	Pro	Glu	Phe	Ser	Glu	Pro
				125					130					135
Glu	Glu	Glu	Ile	Asp	Glu	Asn	Glu	Glu	Ile	Thr	Thr	Thr	Phe	Phe
				140					145					150
Glu	Gln	Ser	Val	Ile	Trp	Val	Pro	Ala	Glu	Lys	Pro	Ile	Glu	Asn
				155					160					165
Arg	Asp	Phe	Leu	Lys	Asn	Ser	Lys	Ile	Leu	Glu	Ile	Cys	Asp	Asn
				170					175					180
Val	Thr	Met	Tyr	Trp	Ile	Asn	Pro	Thr	Leu	Ile	Ser	Val	Ser	Glu
				185					190					195
Leu	Gln	Asp	Phe	Glu	Glu	Glu	Gly	Glu	Asp	Leu	His	Phe	Pro	Ala
				200					205					210
Asn	Glu	Lys	Lys	Gly	Ile	Glu	Gln	Asn	Glu	Gln	Trp	Val	Val	Pro
				215					220					225
Gln	Val	Lys	Val	Glu	Lys	Thr	Arg	His	Ala	Arg	Gln	Ala	Ser	Glu
				230					235					240
Glu	Glu	Leu	Pro	Ile	Asn	Asp	Tyr	Thr	Glu	Asn	Gly	Ile	Glu	Phe
				245					250					255
Asp	Pro	Met	Leu	Asp	Glu	Arg	Gly	Tyr	Cys	Cys	Ile	Tyr	Cys	Arg
				260					265					270
Arg	Gly	Asn	Arg	Tyr	Cys	Arg	Arg	Val	Cys	Glu	Pro	Leu	Leu	Gly
				275					280					285
Tyr	Tyr	Pro	Tyr	Pro	Tyr	Cys	Tyr	Gln	Gly	Gly	Arg	Val	Ile	Cys
				290					295					300
Arg	Val	Ile	Met	Pro	Cys	Asn	Trp	Trp	Val	Ala	Arg	Met	Leu	Gly
				305					310					315

Arg Val

<210> 117

<211> 2121

<212> DNA

<213> Homo Sapien

<400> 117

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 gagccatgat cacaccactg cactccagcc aggtgacata gcgagatcct 2050
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<210> 118

<211> 261

<212> PRT

<213> Homo Sapien

<400> 118

Met	Ser	Thr	Thr	Thr	Cys	Gln	Val	Val	Ala	Phe	Leu	Leu	Ser	Ile
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Leu	Gly	Leu	Ala	Gly	Cys	Ile	Ala	Ala	Thr	Gly	Met	Asp	Met	Trp
				20					25					30
Ser	Thr	Gln	Asp	Leu	Tyr	Asp	Asn	Pro	Val	Thr	Ser	Val	Phe	Gln
				35					40					45
Tyr	Glu	Gly	Leu	Trp	Arg	Ser	Cys	Val	Arg	Gln	Ser	Ser	Gly	Phe
				50					55					60
Thr	Glu	Cys	Arg	Pro	Tyr	Phe	Thr	Ile	Leu	Gly	Leu	Pro	Ala	Met
				65					70					75
Leu	Gln	Ala	Val	Arg	Ala	Leu	Met	Ile	Val	Gly	Ile	Val	Leu	Gly
				80					85					90
Ala	Ile	Gly	Leu	Leu	Val	Ser	Ile	Phe	Ala	Leu	Lys	Cys	Ile	Arg
				95					100					105
Ile	Gly	Ser	Met	Glu	Asp	Ser	Ala	Lys	Ala	Asn	Met	Thr	Leu	Thr
				110					115					120

Ser Gly Ile Met	Phe Ile Val Ser Gly	Leu Cys Ala Ile Ala Gly	
	125	130	135
Val Ser Val Phe	Ala Asn Met Leu Val	Thr Asn Phe Trp Met Ser	
	140	145	150
Thr Ala Asn Met	Tyr Thr Gly Met Gly	Gly Met Val Gln Thr Val	
	155	160	165
Gln Thr Arg Tyr	Thr Phe Gly Ala Ala	Leu Phe Val Gly Trp Val	
	170	175	180
Ala Gly Gly Leu	Thr Leu Ile Gly Gly	Val Met Met Cys Ile Ala	
	185	190	195
Cys Arg Gly Leu	Ala Pro Glu Glu Thr	Asn Tyr Lys Ala Val Ser	
	200	205	210
Tyr His Ala Ser	Gly His Ser Val Ala	Tyr Lys Pro Gly Gly Phe	
	215	220	225
Lys Ala Ser Thr	Gly Phe Gly Ser Asn	Thr Lys Asn Lys Lys Ile	
	230	235	240
Tyr Asp Gly Gly	Ala Arg Thr Glu Asp	Glu Val Gln Ser Tyr Pro	
	245	250	255
Ser Lys His Asp	Tyr Val		
	260		

<210> 119

<211> 2010

<212> DNA

<213> Homo Sapien

<400> 119

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gtgggcacag tggctgtcac tgtcatgcct cagtggagag tgtcggcctt 200
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<210> 120

<211> 225

<212> PRT

<213> Homo Sapien

<400> 120

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Val	Gly	Met	Val	Gly	Thr	Val	Ala	Val	Thr	Val	Met	Pro	Gln	Trp
				20					25					30

Arg	Val	Ser	Ala	Phe	Ile	Glu	Asn	Asn	Ile	Val	Val	Phe	Glu	Asn
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Phe	Trp	Glu	Gly	Leu	Trp	Met	Asn	Cys	Val	Arg	Gln	Ala	Asn	Ile
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Arg	Met	Gln	Cys	Lys	Ile	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Ser	Pro
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Asp	Leu	Gln	Ala	Ala	Arg	Gly	Leu	Met	Cys	Ala	Ala	Ser	Val	Met
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Ser	Phe	Leu	Ala	Phe	Met	Met	Ala	Ile	Leu	Gly	Met	Lys	Cys	Thr
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Arg	Cys	Thr	Gly	Asp	Asn	Glu	Lys	Val	Lys	Ala	His	Ile	Leu	Leu
				110					115					120

Thr	Ala	Gly	Ile	Ile	Phe	Ile	Ile	Thr	Gly	Met	Val	Val	Leu	Ile
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Pro	Val	Ser	Trp	Val	Ala	Asn	Ala	Ile	Ile	Arg	Asp	Phe	Tyr	Asn
				140					145					150

Ser	Ile	Val	Asn	Val	Ala	Gln	Lys	Arg	Glu	Leu	Gly	Glu	Ala	Leu
				155					160					165

Tyr	Leu	Gly	Trp	Thr	Thr	Ala	Leu	Val	Leu	Ile	Val	Gly	Gly	Ala
				170					175					180

Leu	Phe	Cys	Cys	Val	Phe	Cys	Cys	Asn	Glu	Lys	Ser	Ser	Ser	Tyr
				185					190					195

Arg	Tyr	Ser	Ile	Pro	Ser	His	Arg	Thr	Thr	Gln	Lys	Ser	Tyr	His
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Thr	Gly	Lys	Lys	Ser	Pro	Ser	Val	Tyr	Ser	Arg	Ser	Gln	Tyr	Val
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<210> 121

<211> 1257
<212> DNA
<213> Homo Sapien

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<210> 122

<211> 243
 <212> PRT
 <213> Homo Sapien

<400> 122

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Ser	Glu	Ile	Pro	Lys	Gly	Lys	Gln	Lys	Ala	Gln	Leu	Arg	Gln	Arg	35	40	45	
Glu	Val	Val	Asp	Leu	Tyr	Asn	Gly	Met	Cys	Leu	Gln	Gly	Pro	Ala	50	55	60	
Gly	Val	Pro	Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Asn	Val	Ile	Pro	65	70	75	
Gly	Thr	Pro	Gly	Ile	Pro	Gly	Arg	Asp	Gly	Phe	Lys	Gly	Glu	Lys	80	85	90	
Gly	Glu	Cys	Leu	Arg	Glu	Ser	Phe	Glu	Glu	Ser	Trp	Thr	Pro	Asn	95	100	105	
Tyr	Lys	Gln	Cys	Ser	Trp	Ser	Ser	Leu	Asn	Tyr	Gly	Ile	Asp	Leu	110	115	120	
Gly	Lys	Ile	Ala	Glu	Cys	Thr	Phe	Thr	Lys	Met	Arg	Ser	Asn	Ser	125	130	135	
Ala	Leu	Arg	Val	Leu	Phe	Ser	Gly	Ser	Leu	Arg	Leu	Lys	Cys	Arg	140	145	150	
Asn	Ala	Cys	Cys	Gln	Arg	Trp	Tyr	Phe	Thr	Phe	Asn	Gly	Ala	Glu	155	160	165	
Cys	Ser	Gly	Pro	Leu	Pro	Ile	Glu	Ala	Ile	Ile	Tyr	Leu	Asp	Gln	170	175	180	
Gly	Ser	Pro	Glu	Met	Asn	Ser	Thr	Ile	Asn	Ile	His	Arg	Thr	Ser	185	190	195	
Ser	Val	Glu	Gly	Leu	Cys	Glu	Gly	Ile	Gly	Ala	Gly	Leu	Val	Asp	200	205	210	
Val	Ala	Ile	Trp	Val	Gly	Thr	Cys	Ser	Asp	Tyr	Pro	Lys	Gly	Asp	215	220	225	
Ala	Ser	Thr	Gly	Trp	Asn	Ser	Val	Ser	Arg	Ile	Ile	Ile	Glu	Glu	230	235	240	
Leu	Pro	Lys																

<210> 123

<211> 2379
<212> DNA
<213> Homo Sapien

<400> 123

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 <211> 513
 <212> PRT
 <213> Homo Sapien

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 20 25 30
 Glu Arg Gly Cys Pro Lys Gly Cys Arg Cys Glu Gly Lys Met Val
 35 40 45

Tyr	Cys	Glu	Ser	Gln	Lys	Leu	Gln	Glu	Ile	Pro	Ser	Ser	Ile	Ser	
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Ala	Gly	Cys	Leu	Gly	Leu	Ser	Leu	Arg	Tyr	Asn	Ser	Leu	Gln	Lys	
				65					70					75	
Leu	Lys	Tyr	Asn	Gln	Phe	Lys	Gly	Leu	Asn	Gln	Leu	Thr	Trp	Leu	
				80					85					90	
Tyr	Leu	Asp	His	Asn	His	Ile	Ser	Asn	Ile	Asp	Glu	Asn	Ala	Phe	
				95					100					105	
Asn	Gly	Ile	Arg	Arg	Leu	Lys	Glu	Leu	Ile	Leu	Ser	Ser	Asn	Arg	
				110					115					120	
Ile	Ser	Tyr	Phe	Leu	Asn	Asn	Thr	Phe	Arg	Pro	Val	Thr	Asn	Leu	
				125					130					135	
Arg	Asn	Leu	Asp	Leu	Ser	Tyr	Asn	Gln	Leu	His	Ser	Leu	Gly	Ser	
				140					145					150	
Glu	Gln	Phe	Arg	Gly	Leu	Arg	Lys	Leu	Leu	Ser	Leu	His	Leu	Arg	
				155					160					165	
Ser	Asn	Ser	Leu	Arg	Thr	Ile	Pro	Val	Arg	Ile	Phe	Gln	Asp	Cys	
				170					175					180	
Arg	Asn	Leu	Glu	Leu	Leu	Asp	Leu	Gly	Tyr	Asn	Arg	Ile	Arg	Ser	
				185					190					195	
Leu	Ala	Arg	Asn	Val	Phe	Ala	Gly	Met	Ile	Arg	Leu	Lys	Glu	Leu	
				200					205					210	
His	Leu	Glu	His	Asn	Gln	Phe	Ser	Lys	Leu	Asn	Leu	Ala	Leu	Phe	
				215					220					225	
Pro	Arg	Leu	Val	Ser	Leu	Gln	Asn	Leu	Tyr	Leu	Gln	Trp	Asn	Lys	
				230					235					240	
Ile	Ser	Val	Ile	Gly	Gln	Thr	Met	Ser	Trp	Thr	Trp	Ser	Ser	Leu	
				245					250					255	
Gln	Arg	Leu	Asp	Leu	Ser	Gly	Asn	Glu	Ile	Glu	Ala	Phe	Ser	Gly	
				260					265					270	
Pro	Ser	Val	Phe	Gln	Cys	Val	Pro	Asn	Leu	Gln	Arg	Leu	Asn	Leu	
				275					280					285	
Asp	Ser	Asn	Lys	Leu	Thr	Phe	Ile	Gly	Gln	Glu	Ile	Leu	Asp	Ser	
				290					295					300	
Trp	Ile	Ser	Leu	Asn	Asp	Ile	Ser	Leu	Ala	Gly	Asn	Ile	Trp	Glu	
				305					310					315	
Cys	Ser	Arg	Asn	Ile	Cys	Ser	Leu	Val	Asn	Trp	Leu	Lys	Ser	Phe	
				320					325					330	

Lys	Gly	Leu	Arg	Glu	Asn	Thr	Ile	Ile	Cys	Ala	Ser	Pro	Lys	Glu	335	340	345
Leu	Gln	Gly	Val	Asn	Val	Ile	Asp	Ala	Val	Lys	Asn	Tyr	Ser	Ile	350	355	360
Cys	Gly	Lys	Ser	Thr	Thr	Glu	Arg	Phe	Asp	Leu	Ala	Arg	Ala	Leu	365	370	375
Pro	Lys	Pro	Thr	Phe	Lys	Pro	Lys	Leu	Pro	Arg	Pro	Lys	His	Glu	380	385	390
Ser	Lys	Pro	Pro	Leu	Pro	Pro	Thr	Val	Gly	Ala	Thr	Glu	Pro	Gly	395	400	405
Pro	Glu	Thr	Asp	Ala	Asp	Ala	Glu	His	Ile	Ser	Phe	His	Lys	Ile	410	415	420
Ile	Ala	Gly	Ser	Val	Ala	Leu	Phe	Leu	Ser	Val	Leu	Val	Ile	Leu	425	430	435
Leu	Val	Ile	Tyr	Val	Ser	Trp	Lys	Arg	Tyr	Pro	Ala	Ser	Met	Lys	440	445	450
Gln	Leu	Gln	Gln	Arg	Ser	Leu	Met	Arg	Arg	His	Arg	Lys	Lys	Lys	455	460	465
Arg	Gln	Ser	Leu	Lys	Gln	Met	Thr	Pro	Ser	Thr	Gln	Glu	Phe	Tyr	470	475	480
Val	Asp	Tyr	Lys	Pro	Thr	Asn	Thr	Glu	Thr	Ser	Glu	Met	Leu	Leu	485	490	495
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Cys Glu Val																	

<210> 125

<211> 998

<212> DNA

<213> Homo Sapien

<400> 125

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<210> 126

<211> 323

<212> PRT

<213> Homo Sapien

<400> 126

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				20					25					30
Thr	Val	Ala	Glu	Leu	Ala	Thr	Phe	Pro	Leu	Asp	Leu	Thr	Lys	Thr
				35					40					45
Arg	Leu	Gln	Met	Gln	Gly	Glu	Ala	Ala	Leu	Ala	Arg	Leu	Gly	Asp
				50					55					60
Gly	Ala	Arg	Glu	Ser	Ala	Pro	Tyr	Arg	Gly	Met	Val	Arg	Thr	Ala
				65					70					75
Leu	Gly	Ile	Ile	Glu	Glu	Glu	Gly	Phe	Leu	Lys	Leu	Trp	Gln	Gly
				80					85					90
Val	Thr	Pro	Ala	Ile	Tyr	Arg	His	Val	Val	Tyr	Ser	Gly	Gly	Arg
				95					100					105
Met	Val	Thr	Tyr	Glu	His	Leu	Arg	Glu	Val	Val	Phe	Gly	Lys	Ser
				110					115					120

Glu	Asp	Glu	His	Tyr	Pro	Leu	Trp	Lys	Ser	Val	Ile	Gly	Gly	Met	
				125					130					135	
Met	Ala	Gly	Val	Ile	Gly	Gln	Phe	Leu	Ala	Asn	Pro	Thr	Asp	Leu	
				140					145					150	
Val	Lys	Val	Gln	Met	Gln	Met	Glu	Gly	Lys	Arg	Lys	Leu	Glu	Gly	
				155					160					165	
Lys	Pro	Leu	Arg	Phe	Arg	Gly	Val	His	His	Ala	Phe	Ala	Lys	Ile	
				170					175					180	
Leu	Ala	Glu	Gly	Gly	Ile	Arg	Gly	Leu	Trp	Ala	Gly	Trp	Val	Pro	
				185					190					195	
Asn	Ile	Gln	Arg	Ala	Ala	Leu	Val	Asn	Met	Gly	Asp	Leu	Thr	Thr	
				200					205					210	
Tyr	Asp	Thr	Val	Lys	His	Tyr	Leu	Val	Leu	Asn	Thr	Pro	Leu	Glu	
				215					220					225	
Asp	Asn	Ile	Met	Thr	His	Gly	Leu	Ser	Ser	Leu	Cys	Ser	Gly	Leu	
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Val	Ala	Ser	Ile	Leu	Gly	Thr	Pro	Ala	Asp	Val	Ile	Lys	Ser	Arg	
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Ile	Met	Asn	Gln	Pro	Arg	Asp	Lys	Gln	Gly	Arg	Gly	Leu	Leu	Tyr	
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Lys	Ser	Ser	Thr	Asp	Cys	Leu	Ile	Gln	Ala	Val	Gln	Gly	Glu	Gly	
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Phe	Met	Ser	Leu	Tyr	Lys	Gly	Phe	Leu	Pro	Ser	Trp	Leu	Arg	Met	
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Thr	Pro	Trp	Ser	Met	Val	Phe	Trp	Leu	Thr	Tyr	Glu	Lys	Ile	Arg	
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				320											

<210> 127

<211> 1505

<212> DNA

<213> Homo Sapien

<400> 127

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<210> 128
 <211> 260
 <212> PRT
 <213> Homo Sapien

<400> 128

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Leu	Val	Gln	Gln	Gly	Leu	Lys	Val	Val	Gly	Cys	Ala	Arg	Thr	Val	35	40	45	
Gly	Asn	Ile	Glu	Glu	Leu	Ala	Ala	Glu	Cys	Lys	Ser	Ala	Gly	Tyr	50	55	60	
Pro	Gly	Thr	Leu	Ile	Pro	Tyr	Arg	Cys	Asp	Leu	Ser	Asn	Glu	Glu	65	70	75	
Asp	Ile	Leu	Ser	Met	Phe	Ser	Ala	Ile	Arg	Ser	Gln	His	Ser	Gly	80	85	90	
Val	Asp	Ile	Cys	Ile	Asn	Asn	Ala	Gly	Leu	Ala	Arg	Pro	Asp	Thr	95	100	105	
Leu	Leu	Ser	Gly	Ser	Thr	Ser	Gly	Trp	Lys	Asp	Met	Phe	Asn	Val	110	115	120	
Asn	Val	Leu	Ala	Leu	Ser	Ile	Cys	Thr	Arg	Glu	Ala	Tyr	Gln	Ser	125	130	135	
Met	Lys	Glu	Arg	Asn	Val	Asp	Asp	Gly	His	Ile	Ile	Asn	Ile	Asn	140	145	150	
Ser	Met	Ser	Gly	His	Arg	Val	Leu	Pro	Leu	Ser	Val	Thr	His	Phe	155	160	165	
Tyr	Ser	Ala	Thr	Lys	Tyr	Ala	Val	Thr	Ala	Leu	Thr	Glu	Gly	Leu	170	175	180	
Arg	Gln	Glu	Leu	Arg	Glu	Ala	Gln	Thr	His	Ile	Arg	Ala	Thr	Cys	185	190	195	
Ile	Ser	Pro	Gly	Val	Val	Glu	Thr	Gln	Phe	Ala	Phe	Lys	Leu	His	200	205	210	
Asp	Lys	Asp	Pro	Glu	Lys	Ala	Ala	Ala	Thr	Tyr	Glu	Gln	Met	Lys	215	220	225	
Cys	Leu	Lys	Pro	Glu	Asp	Val	Ala	Glu	Ala	Val	Ile	Tyr	Val	Leu	230	235	240	
Ser	Thr	Pro	Ala	His	Ile	Gln	Ile	Gly	Asp	Ile	Gln	Met	Arg	Pro	245	250	255	
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<210> 129

<211> 1177

<212> DNA

<213> Homo Sapien

<400> 129

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<210> 130

<211> 111

<212> PRT

<213> Homo Sapien

<400> 130

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Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg	35	40	45
Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val	50	55	60
Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro	65	70	75
Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser	80	85	90
Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val	95	100	105
Ala Val Glu Cys Leu Lys	110		

<210> 131
 <211> 2061
 <212> DNA
 <213> Homo Sapien

<400> 131
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 aacctcccaa agtatgtaaa agagttacat ttgcaagaaa ataacataag 400
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<210> 132

<211> 649
 <212> PRT
 <213> Homo Sapien

<400> 132

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				20					25					30	
Cys	Pro	Ser	Val	Cys	Arg	Cys	Asp	Ala	Gly	Phe	Ile	Tyr	Cys	Asn	
				35					40					45	
Asp	Arg	Phe	Leu	Thr	Ser	Ile	Pro	Thr	Gly	Ile	Pro	Glu	Asp	Ala	
				50					55					60	
Thr	Thr	Leu	Tyr	Leu	Gln	Asn	Asn	Gln	Ile	Asn	Asn	Ala	Gly	Ile	
				65					70					75	
Pro	Ser	Asp	Leu	Lys	Asn	Leu	Leu	Lys	Val	Glu	Arg	Ile	Tyr	Leu	
				80					85					90	
Tyr	His	Asn	Ser	Leu	Asp	Glu	Phe	Pro	Thr	Asn	Leu	Pro	Lys	Tyr	
				95					100					105	
Val	Lys	Glu	Leu	His	Leu	Gln	Glu	Asn	Asn	Ile	Arg	Thr	Ile	Thr	
				110					115					120	
Tyr	Asp	Ser	Leu	Ser	Lys	Ile	Pro	Tyr	Leu	Glu	Glu	Leu	His	Leu	
				125					130					135	
Asp	Asp	Asn	Ser	Val	Ser	Ala	Val	Ser	Ile	Glu	Glu	Gly	Ala	Phe	
				140					145					150	
Arg	Asp	Ser	Asn	Tyr	Leu	Arg	Leu	Leu	Phe	Leu	Ser	Arg	Asn	His	
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Leu	Ser	Thr	Ile	Pro	Trp	Gly	Leu	Pro	Arg	Thr	Ile	Glu	Glu	Leu	
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Arg	Leu	Asp	Asp	Asn	Arg	Ile	Ser	Thr	Ile	Ser	Ser	Pro	Ser	Leu	
				185					190					195	
Gln	Gly	Leu	Thr	Ser	Leu	Lys	Arg	Leu	Val	Leu	Asp	Gly	Asn	Leu	
				200					205					210	
Leu	Asn	Asn	His	Gly	Leu	Gly	Asp	Lys	Val	Phe	Phe	Asn	Leu	Val	
				215					220					225	
Asn	Leu	Thr	Glu	Leu	Ser	Leu	Val	Arg	Asn	Ser	Leu	Thr	Ala	Ala	
				230					235					240	
Pro	Val	Asn	Leu	Pro	Gly	Thr	Asn	Leu	Arg	Lys	Leu	Tyr	Leu	Gln	
				245					250					255	
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				275					280					285
Leu	Pro	Gln	Gly	Ile	Phe	Asp	Asp	Leu	Asp	Asn	Ile	Thr	Gln	Leu
				290					295					300
Ile	Leu	Arg	Asn	Asn	Pro	Trp	Tyr	Cys	Gly	Cys	Lys	Met	Lys	Trp
				305					310					315
Val	Arg	Asp	Trp	Leu	Gln	Ser	Leu	Pro	Val	Lys	Val	Asn	Val	Arg
				320					325					330
Gly	Leu	Met	Cys	Gln	Ala	Pro	Glu	Lys	Val	Arg	Gly	Met	Ala	Ile
				335					340					345
Lys	Asp	Leu	Asn	Ala	Glu	Leu	Phe	Asp	Cys	Lys	Asp	Ser	Gly	Ile
				350					355					360
Val	Ser	Thr	Ile	Gln	Ile	Thr	Thr	Ala	Ile	Pro	Asn	Thr	Val	Tyr
				365					370					375
Pro	Ala	Gln	Gly	Gln	Trp	Pro	Ala	Pro	Val	Thr	Lys	Gln	Pro	Asp
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Ile	Lys	Asn	Pro	Lys	Leu	Thr	Lys	Asp	Gln	Gln	Thr	Thr	Gly	Ser
				395					400					405
Pro	Ser	Arg	Lys	Thr	Ile	Thr	Ile	Thr	Val	Lys	Ser	Val	Thr	Ser
				410					415					420
Asp	Thr	Ile	His	Ile	Ser	Trp	Lys	Leu	Ala	Leu	Pro	Met	Thr	Ala
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Leu	Arg	Leu	Ser	Trp	Leu	Lys	Leu	Gly	His	Ser	Pro	Ala	Phe	Gly
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Ser	Ile	Thr	Glu	Thr	Ile	Val	Thr	Gly	Glu	Arg	Ser	Glu	Tyr	Leu
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Val	Thr	Ala	Leu	Glu	Pro	Asp	Ser	Pro	Tyr	Lys	Val	Cys	Met	Val
				470					475					480
Pro	Met	Glu	Thr	Ser	Asn	Leu	Tyr	Leu	Phe	Asp	Glu	Thr	Pro	Val
				485					490					495
Cys	Ile	Glu	Thr	Glu	Thr	Ala	Pro	Leu	Arg	Met	Tyr	Asn	Pro	Thr
				500					505					510
Thr	Thr	Leu	Asn	Arg	Glu	Gln	Glu	Lys	Glu	Pro	Tyr	Lys	Asn	Pro
				515					520					525
Asn	Leu	Pro	Leu	Ala	Ala	Ile	Ile	Gly	Gly	Ala	Val	Ala	Leu	Val
				530					535					540
Thr	Ile	Ala	Leu	Leu	Ala	Leu	Val	Cys	Trp	Tyr	Val	His	Arg	Asn

	545		550		555
Gly Ser Leu Phe	Ser Arg Asn Cys Ala	Tyr Ser Lys Gly Arg Arg			
	560	565	570		
Arg Lys Asp Asp	Tyr Ala Glu Ala Gly	Thr Lys Lys Asp Asn Ser			
	575	580	585		
Ile Leu Glu Ile	Arg Glu Thr Ser Phe	Gln Met Leu Pro Ile Ser			
	590	595	600		
Asn Glu Pro Ile	Ser Lys Glu Glu Phe	Val Ile His Thr Ile Phe			
	605	610	615		
Pro Pro Asn Gly	Met Asn Leu Tyr Lys	Asn Asn His Ser Glu Ser			
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Ser Ser Asn Arg	Ser Tyr Arg Asp Ser	Gly Ile Pro Asp Ser Asp			
	635	640	645		
His Ser His Ser					

<210> 133

<211> 1882

<212> DNA

<213> Homo Sapien

<400> 133

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<210> 134

<211> 440

<212> PRT

<213> Homo Sapien

<400> 134

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			20					25					30	

Thr	Ser	Ser	Glu	Gln	Arg	Pro	Ala	Met	Ala	Ser	Leu	Gly	Leu	Leu	
				35					40					45	
Leu	Leu	Leu	Leu	Leu	Thr	Ala	Leu	Pro	Pro	Leu	Trp	Ser	Ser	Ser	
				50					55					60	
Leu	Pro	Gly	Leu	Asp	Thr	Ala	Glu	Ser	Lys	Ala	Thr	Ile	Ala	Asp	
				65					70					75	
Leu	Ile	Leu	Ser	Ala	Leu	Glu	Arg	Ala	Thr	Val	Phe	Leu	Glu	Gln	
				80					85					90	
Arg	Leu	Pro	Glu	Ile	Asn	Leu	Asp	Gly	Met	Val	Gly	Val	Arg	Val	
				95					100					105	
Leu	Glu	Glu	Gln	Leu	Lys	Ser	Val	Arg	Glu	Lys	Trp	Ala	Gln	Glu	
				110					115					120	
Pro	Leu	Leu	Gln	Pro	Leu	Ser	Leu	Arg	Val	Gly	Met	Leu	Gly	Glu	
				125					130					135	
Lys	Leu	Glu	Ala	Ala	Ile	Gln	Arg	Ser	Leu	His	Tyr	Leu	Lys	Leu	
				140					145					150	
Ser	Asp	Pro	Lys	Tyr	Leu	Arg	Glu	Phe	Gln	Leu	Thr	Leu	Gln	Pro	
				155					160					165	
Gly	Phe	Trp	Lys	Leu	Pro	His	Ala	Trp	Ile	His	Thr	Asp	Ala	Ser	
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Leu	Val	Tyr	Pro	Thr	Phe	Gly	Pro	Gln	Asp	Ser	Phe	Ser	Glu	Glu	
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Arg	Ser	Asp	Val	Cys	Leu	Val	Gln	Leu	Leu	Gly	Thr	Gly	Thr	Asp	
				200					205					210	
Ser	Ser	Glu	Pro	Cys	Gly	Leu	Ser	Asp	Leu	Cys	Arg	Ser	Leu	Met	
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Thr	Lys	Pro	Gly	Cys	Ser	Gly	Tyr	Cys	Leu	Ser	His	Gln	Leu	Leu	
				230					235					240	
Phe	Phe	Leu	Trp	Ala	Arg	Met	Arg	Gly	Cys	Thr	Gln	Gly	Pro	Leu	
				245					250					255	
Gln	Gln	Ser	Gln	Asp	Tyr	Ile	Asn	Leu	Phe	Cys	Ala	Asn	Met	Met	
				260					265					270	
Asp	Leu	Asn	Arg	Arg	Ala	Glu	Ala	Ile	Gly	Tyr	Ala	Tyr	Pro	Thr	
				275					280					285	
Arg	Asp	Ile	Phe	Met	Glu	Asn	Ile	Met	Phe	Cys	Gly	Met	Gly	Gly	
				290					295					300	
Phe	Ser	Asp	Phe	Tyr	Lys	Leu	Arg	Trp	Leu	Glu	Ala	Ile	Leu	Ser	
				305					310					315	

Trp	Gln	Lys	Gln	Gln	Glu	Gly	Cys	Phe	Gly	Glu	Pro	Asp	Ala	Glu	
			320						325					330	
Asp	Glu	Glu	Leu	Ser	Lys	Ala	Ile	Gln	Tyr	Gln	Gln	His	Phe	Ser	
			335						340					345	
Arg	Arg	Val	Lys	Arg	Arg	Glu	Lys	Gln	Phe	Pro	Asp	Ser	Arg	Ser	
			350						355					360	
Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Arg	Asn	Leu	Gly	Ser	Leu	Gln	
			365						370					375	
Pro	Leu	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ile	Leu	Pro	
			380						385					390	
Ser	Ser	Trp	Asp	Tyr	Arg	Ser	Val	Pro	Pro	Tyr	Leu	Ala	Asn	Phe	
			395						400					405	
Tyr	Ile	Phe	Leu	Val	Glu	Thr	Gly	Phe	His	His	Val	Ala	His	Ala	
			410						415					420	
Gly	Leu	Glu	Leu	Leu	Ile	Ser	Arg	Asp	Pro	Pro	Thr	Ser	Gly	Ser	
			425						430					435	
Gln	Ser	Val	Gly	Leu											
			440												

<210> 135
 <211> 884
 <212> DNA
 <213> Homo Sapien

<400> 135
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 cccgtctctgc tgctgctgct gctatcgggg gatgtccaga gctcggaggt 100
 gcccggggct gctgctgagg gatcgggagg gaggggggtc ggcataggag 150
 atcgcttcaa gattgagggg cgtgcagttg ttccaggggt gaagcctcag 200
 gactggatct cggcggcccg agtgctggta gacggagaag agcacgtcgg 250
 tttccttaag acagatggga gttttgtggt tcatgatata ctttctggat 300
 cttatgtagt ggaagttgta tctccagctt acagatttga tcccgttcga 350
 gtggatatca cttcgaaagg aaaaatgaga gcaagatatg tgaattacat 400
 caaaacatca gaggttgtca gactgcccta tcctctcaa atgaaatctt 450
 cagggtccacc ttcttacttt attaaaaggg aatcgtgggg ctggacagac 500
 tttctaataga acccaatggg tatgatgatg gttcttcctt tattgatatt 550
 tgtgcttctg cctaaagtgg tcaacacaag tgatcctgac atgagacggg 600
 aaatggagca gtcaatgaat atgctgaatt ccaaccatga gttgcctgat 650

gtttctgagt tcatgacaag actcttctct tcaaaatcat ctggcaaadc 700
tagcagcggc agcagtaaaa caggcaaaag tggggctggc aaaaggaggt 750
agtcaggccg tccagagctg gcatttgcac aaacacggca acactgggtg 800
gcatccaagt cttggaaaac cgtgtgaagc aactactata aacttgagtc 850
atccccgacgt tgatctctta caactgtgta tggt 884

<210> 136

<211> 242

<212> PRT

<213> Homo Sapien

<400> 136

Met	Ala	Ala	Ala	Leu	Trp	Gly	Phe	Phe	Pro	Val	Leu	Leu	Leu	Leu	1	5	10	15
Leu	Leu	Ser	Gly	Asp	Val	Gln	Ser	Ser	Glu	Val	Pro	Gly	Ala	Ala	20	25	30	
Ala	Glu	Gly	Ser	Gly	Gly	Ser	Gly	Val	Gly	Ile	Gly	Asp	Arg	Phe	35	40	45	
Lys	Ile	Glu	Gly	Arg	Ala	Val	Val	Pro	Gly	Val	Lys	Pro	Gln	Asp	50	55	60	
Trp	Ile	Ser	Ala	Ala	Arg	Val	Leu	Val	Asp	Gly	Glu	Glu	His	Val	65	70	75	
Gly	Phe	Leu	Lys	Thr	Asp	Gly	Ser	Phe	Val	Val	His	Asp	Ile	Pro	80	85	90	
Ser	Gly	Ser	Tyr	Val	Val	Glu	Val	Val	Ser	Pro	Ala	Tyr	Arg	Phe	95	100	105	
Asp	Pro	Val	Arg	Val	Asp	Ile	Thr	Ser	Lys	Gly	Lys	Met	Arg	Ala	110	115	120	
Arg	Tyr	Val	Asn	Tyr	Ile	Lys	Thr	Ser	Glu	Val	Val	Arg	Leu	Pro	125	130	135	
Tyr	Pro	Leu	Gln	Met	Lys	Ser	Ser	Gly	Pro	Pro	Ser	Tyr	Phe	Ile	140	145	150	
Lys	Arg	Glu	Ser	Trp	Gly	Trp	Thr	Asp	Phe	Leu	Met	Asn	Pro	Met	155	160	165	
Val	Met	Met	Met	Val	Leu	Pro	Leu	Leu	Ile	Phe	Val	Leu	Leu	Pro	170	175	180	
Lys	Val	Val	Asn	Thr	Ser	Asp	Pro	Asp	Met	Arg	Arg	Glu	Met	Glu	185	190	195	
Gln	Ser	Met	Asn	Met	Leu	Asn	Ser	Asn	His	Glu	Leu	Pro	Asp	Val				

	200		205		210
Ser Glu Phe Met	Thr Arg Leu Phe Ser	Ser Lys Ser Ser Gly Lys			
	215	220		225	
Ser Ser Ser Gly	Ser Ser Lys Thr Gly	Lys Ser Gly Ala Gly Lys			
	230	235		240	

Arg Arg

<210> 137
 <211> 1571
 <212> DNA
 <213> Homo Sapien

<400> 137
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 gtgggtctga ggggaccaga aggggtgagct acgttggtt tctggaaggg 100
 gaggtatat gcgtcaattc cccaaaacaa gttttgacat ttcccctgaa 150
 atgtcattct ctatctattc actgcaagt cctgctgttc caggccttac 200
 ctgctgggca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250
 cgacctgtgc caccaactcg cactcagact ctgaactcag acctgaaatc 300
 ttctcttcac gggaggcttg gcagtttttc ttactcctgt ggtctccaga 350
 tttcaggcct aagatgaaag cctctagtct tgccttcagc cttctctctg 400
 ctgcgtttta tctcctatgg actccttcca ctggactgaa gacactcaat 450
 ttgggaagct gtgtgatcgc cacaaacctt caggaaatac gaaatggatt 500
 ttctgagata cggggcagtg tgcaagccaa agatggaaac attgacatca 550
 gaatcttaag gaggactgag tctttgcaag acacaaagcc tgcgaaatcga 600
 tgctgcctcc tgcgccattt gctaagactc tatctggaca gggatattta 650
 aaactaccag acccctgacc attatactct ccggaagatc agcagcctcg 700
 ccaattcctt tcttaccatc aagaaggacc tccggctctc tcatgcccac 750
 atgacatgcc attgtgggga ggaagcaatg aagaaataca gccagattct 800
 gagtcacttt gaaaagctgg aacctcaggc agcagttgtg aaggcttttg 850
 gggaactaga cattcttctg caatggatgg aggagacaga ataggaggaa 900
 agtgatgctg ctgctaagaa tattcgaggt caagagctcc agtcttcaat 950
 acctgcagag gagggcatgac cccaaaccac catctcttta ctgtactagt 1000
 cttgtgctgg tcacagtgtg tcttatttat gcattacttg cttccttgca 1050

tgattgtctt tatgcatccc caatcttaat tgagaccata cttgtataag 1100
 atttttgtaa tatctttctg ctattggata tatttattag ttaatatatt 1150
 tatttatttt ttgctattta atgtatttat ttttttactt ggacatgaaa 1200
 ctttaaaaaa attcacagat tatatttata acctgactag agcaggtgat 1250
 gtatttttat acagtaaaaa aaaaaaacct tgtaaattct agaagagtgg 1300
 ctaggggggt tattcatttg tattcaacta aggacatatt tactcatgct 1350
 gatgctctgt gagatatttg aaattgaacc aatgactact taggatgggt 1400
 tgtggaataa gttttgatgt ggaattgcac atctacctta caattactga 1450
 ccatccccag tagactcccc agtcccataa ttgtgtatct tccagccagg 1500
 aatcctacac ggccagcatg tatttctaca aataaagttt tctttgcata 1550
 ccaaaaaaaaa aaaaaaaaaa a 1571

<210> 138

<211> 261

<212> PRT

<213> Homo Sapien

<400> 138

Met	Arg	Gln	Phe	Pro	Lys	Thr	Ser	Phe	Asp	Ile	Ser	Pro	Glu	Met
1				5					10				15	
Ser	Phe	Ser	Ile	Tyr	Ser	Leu	Gln	Val	Pro	Ala	Val	Pro	Gly	Leu
				20					25				30	
Thr	Cys	Trp	Ala	Leu	Thr	Ala	Glu	Pro	Gly	Trp	Gly	Gln	Asn	Lys
				35					40				45	
Gly	Ala	Thr	Thr	Cys	Ala	Thr	Asn	Ser	His	Ser	Asp	Ser	Glu	Leu
				50					55				60	
Arg	Pro	Glu	Ile	Phe	Ser	Ser	Arg	Glu	Ala	Trp	Gln	Phe	Phe	Leu
				65					70				75	
Leu	Leu	Trp	Ser	Pro	Asp	Phe	Arg	Pro	Lys	Met	Lys	Ala	Ser	Ser
				80					85				90	
Leu	Ala	Phe	Ser	Leu	Leu	Ser	Ala	Ala	Phe	Tyr	Leu	Leu	Trp	Thr
				95					100				105	
Pro	Ser	Thr	Gly	Leu	Lys	Thr	Leu	Asn	Leu	Gly	Ser	Cys	Val	Ile
				110					115				120	
Ala	Thr	Asn	Leu	Gln	Glu	Ile	Arg	Asn	Gly	Phe	Ser	Glu	Ile	Arg
				125					130				135	
Gly	Ser	Val	Gln	Ala	Lys	Asp	Gly	Asn	Ile	Asp	Ile	Arg	Ile	Leu

140										145					150				
Arg	Arg	Thr	Glu	Ser	Leu	Gln	Asp	Thr	Lys	Pro	Ala	Asn	Arg	Cys					
				155					160					165					
Cys	Leu	Leu	Arg	His	Leu	Leu	Arg	Leu	Tyr	Leu	Asp	Arg	Val	Phe					
				170					175					180					
Lys	Asn	Tyr	Gln	Thr	Pro	Asp	His	Tyr	Thr	Leu	Arg	Lys	Ile	Ser					
				185					190					195					
Ser	Leu	Ala	Asn	Ser	Phe	Leu	Thr	Ile	Lys	Lys	Asp	Leu	Arg	Leu					
				200					205					210					
Ser	His	Ala	His	Met	Thr	Cys	His	Cys	Gly	Glu	Glu	Ala	Met	Lys					
				215					220					225					
Lys	Tyr	Ser	Gln	Ile	Leu	Ser	His	Phe	Glu	Lys	Leu	Glu	Pro	Gln					
				230					235					240					
Ala	Ala	Val	Val	Lys	Ala	Leu	Gly	Glu	Leu	Asp	Ile	Leu	Leu	Gln					
				245					250					255					
Trp	Met	Glu	Glu	Thr	Glu														
				260															

<210> 139
 <211> 2395
 <212> DNA
 <213> Homo Sapien

<400> 139
 cctggagccg gaagcgcggc tgcagcaggg cgaggctcca ggtgggggtcg 50
 gttccgcata cagcctagcg tgtccacgat gcggctgggc tccgggactt 100
 tcgctacctg ttgcgtagcg atcgaggtgc tagggatcgc ggtcttcctt 150
 cggggattct tcccggtcc cgttcggtcc tctgccagag cggaacacgg 200
 agcggagccc ccagcgcggc aaccctcggc tggagccagt tctaactgga 250
 ccacgctgcc accacctctc ttcagtaaag ttgttattgt tctgatagat 300
 gccttgagag atgattttgt gtttgggtca aagggtgtga aatttatgcc 350
 ctacacaact taccttgtgg aaaaaggagc atctcacagt tttgtggctg 400
 aagcaaagcc acctacagtt actatgcctc gaatcaaggc attgatgacg 450
 gggagccttc ctggctttgt cgacgtcatc aggaacctca attctcctgc 500
 actgctggaa gacagtgtga taagacaagc aaaagcagct ggaaaaagaa 550
 tagtctttta tggagatgaa acctgggtta aattattccc aaagcatttt 600
 gtggaatatg atggaacaac ctcatttttc gtgtcagatt acacagaggt 650

ggataataat gtcacgaggc atttggataa agtattaaaa agaggagatt 700
 gggacatatt aatcctccac tacctggggc tggaccacat tggccacatt 750
 tcagggccca acagccccct gattgggcag aagctgagcg agatggacag 800
 cgtgctgatg aagatccaca cctcactgca gtcgaaggag agagagacgc 850
 ctttacccaa tttgctggtt ctttgtggtg accatggcat gtctgaaaca 900
 ggaagtcacg gggcctcctc caccgaggag gtgaatacac ctctgatttt 950
 aatcagttct gcgtttgaaa ggaaacccgg tgatatccga catccaaagc 1000
 acgtccaata gacggatgtg gctgcgacac tggcgatagc acttggttta 1050
 ccgattccaa aagacagtgt agggagcctc ctattcccag ttgtggaagg 1100
 aagaccaatg agagagcagt tgagattttt acatttgaat acagtgcagc 1150
 ttagtaaact gttgcaagag aatgtgccgt catatgaaaa agatcctggg 1200
 tttgagcagt ttaaaatgtc agaaagattg catgggaact ggatcagact 1250
 gtacttggag gaaaagcatt cagaagtcct attcaacctg ggctccaagg 1300
 ttctcaggca gtacctggat gctctgaaga cgctgagctt gtccctgagt 1350
 gcacaagtgg cccagttctc accctgctcc tgctcagcgt cccacaggca 1400
 ctgcacagaa aggctgagct ggaagtccca ctgtcatctc ctgggttttc 1450
 tctgctcttt tatttggtga tcctggttct ttcggccggt cacgtcattg 1500
 tgtgcacctc agctgaaagt tcgtgctact tctgtggcct ctcgtggctg 1550
 gcggcaggct gcctttcggt taccagactc tgggtgaaca cctgggtgtg 1600
 gccaaagtgt ggcagtgcc tggacagggg gcctcaggga aggacgtgga 1650
 gcagccttat cccaggcctc tgggtgtccc gacacagggt ttcacatctg 1700
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 gttaccaagg tgattgtaaa gagctggcgg tcacagagga acaagcccc 1800
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 ctgcagctga ggaagaaga gacaatcggc ctggacactc aggagggtca 1900
 aaaggagact tggctgcacc actcatcctg ccacccccag aatgcacct 1950
 gcctcatcag gtccagattt ctttccaagg cggacgtttt ctgttggaat 2000
 tcttagtctt tggcctcgga caccttcatt cgtagctgg ggagtgggtg 2050

tgaggcagtg aagaagaggc ggatgggtcac actcagatcc acagagccca 2100
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 aaccctgcac agccctcatc ccctcttggc ttgagccgtc agaggccctg 2200
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 gggctcatgc tctctctcct gctattgaat tagtacctag ctgcacacag 2350
 tatgtagtta ccaaaagaat aaacggcaat aattgagaaa aaaaa 2395

<210> 140

<211> 310

<212> PRT

<213> Homo Sapien

<400> 140

Met	Arg	Leu	Gly	Ser	Gly	Thr	Phe	Ala	Thr	Cys	Cys	Val	Ala	Ile	1	5	10	15
Glu	Val	Leu	Gly	Ile	Ala	Val	Phe	Leu	Arg	Gly	Phe	Phe	Pro	Ala	20	25	30	
Pro	Val	Arg	Ser	Ser	Ala	Arg	Ala	Glu	His	Gly	Ala	Glu	Pro	Pro	35	40	45	
Ala	Pro	Glu	Pro	Ser	Ala	Gly	Ala	Ser	Ser	Asn	Trp	Thr	Thr	Leu	50	55	60	
Pro	Pro	Pro	Leu	Phe	Ser	Lys	Val	Val	Ile	Val	Leu	Ile	Asp	Ala	65	70	75	
Leu	Arg	Asp	Asp	Phe	Val	Phe	Gly	Ser	Lys	Gly	Val	Lys	Phe	Met	80	85	90	
Pro	Tyr	Thr	Thr	Tyr	Leu	Val	Glu	Lys	Gly	Ala	Ser	His	Ser	Phe	95	100	105	
Val	Ala	Glu	Ala	Lys	Pro	Pro	Thr	Val	Thr	Met	Pro	Arg	Ile	Lys	110	115	120	
Ala	Leu	Met	Thr	Gly	Ser	Leu	Pro	Gly	Phe	Val	Asp	Val	Ile	Arg	125	130	135	
Asn	Leu	Asn	Ser	Pro	Ala	Leu	Leu	Glu	Asp	Ser	Val	Ile	Arg	Gln	140	145	150	
Ala	Lys	Ala	Ala	Gly	Lys	Arg	Ile	Val	Phe	Tyr	Gly	Asp	Glu	Thr	155	160	165	
Trp	Val	Lys	Leu	Phe	Pro	Lys	His	Phe	Val	Glu	Tyr	Asp	Gly	Thr	170	175	180	
Thr	Ser	Phe	Phe	Val	Ser	Asp	Tyr	Thr	Glu	Val	Asp	Asn	Asn	Val				

	185		190		195
Thr Arg His Leu	Asp Lys Val Leu Lys	Arg Gly Asp Trp Asp	Ile		
	200		205		210
Leu Ile Leu His	Tyr Leu Gly Leu Asp	His Ile Gly His Ile	Ser		
	215		220		225
Gly Pro Asn Ser	Pro Leu Ile Gly Gln	Lys Leu Ser Glu Met	Asp		
	230		235		240
Ser Val Leu Met	Lys Ile His Thr Ser	Leu Gln Ser Lys Glu	Arg		
	245		250		255
Glu Thr Pro Leu	Pro Asn Leu Leu Val	Leu Cys Gly Asp His	Gly		
	260		265		270
Met Ser Glu Thr	Gly Ser His Gly Ala	Ser Ser Thr Glu Glu	Val		
	275		280		285
Asn Thr Pro Leu	Ile Leu Ile Ser Ser	Ala Phe Glu Arg Lys	Pro		
	290		295		300
Gly Asp Ile Arg	His Pro Lys His Val	Gln			
	305		310		

<210> 141
 <211> 754
 <212> DNA
 <213> Homo Sapien

<400> 141
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 agctactgcc ctacagaaag ttactagtgc cctaaagctg gcgctggcac 100
 tgatgttact gctgctgttg gagtacaact tccctataga aaacaactgc 150
 cagcacctta agaccactca caccttcaga gtgaagaact taaacccgaa 200
 gaaattcagc attcatgacc aggatcacia agtactgggc ctggactctg 250
 ggaatctcat agcagttcca gataaaaact acatacgccc agagatcttc 300
 tttgcattag cctcatcctt gagctcagcc tctgcggaga aaggaagtcc 350
 gattctcctg ggggtctcta aaggggagtt ttgtctctac tgtgacaagg 400
 ataaaggaca aagtcattcca tcccttcagc tgaagaagga gaaactgatg 450
 aagctggctg cccaaaagga atcagcacgc cggcccttca tcttttatag 500
 ggctcagggt ggctcctgga acatgctgga gtcggcggct caccgccgat 550
 gggtcatctg cacctcctgc aattgtaatg agcctgttgg ggtgacagat 600
 aaatttgaga acaggaaaca cattgaattt tcatttcaac cagtttgcaa 650

agctgaaatg agccccagtg aggtcagcga ttaggaaact gccccattga 700
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 cact 754

<210> 142
 <211> 193
 <212> PRT
 <213> Homo Sapien

<400> 142
 Met Leu Leu Leu Leu Leu Glu Tyr Asn Phe Pro Ile Glu Asn Asn
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 Cys Gln His Leu Lys Thr Thr His Thr Phe Arg Val Lys Asn Leu
 20 25 30
 Asn Pro Lys Lys Phe Ser Ile His Asp Gln Asp His Lys Val Leu
 35 40 45
 Val Leu Asp Ser Gly Asn Leu Ile Ala Val Pro Asp Lys Asn Tyr
 50 55 60
 Ile Arg Pro Glu Ile Phe Phe Ala Leu Ala Ser Ser Leu Ser Ser
 65 70 75
 Ala Ser Ala Glu Lys Gly Ser Pro Ile Leu Leu Gly Val Ser Lys
 80 85 90
 Gly Glu Phe Cys Leu Tyr Cys Asp Lys Asp Lys Gly Gln Ser His
 95 100 105
 Pro Ser Leu Gln Leu Lys Lys Glu Lys Leu Met Lys Leu Ala Ala
 110 115 120
 Gln Lys Glu Ser Ala Arg Arg Pro Phe Ile Phe Tyr Arg Ala Gln
 125 130 135
 Val Gly Ser Trp Asn Met Leu Glu Ser Ala Ala His Pro Gly Trp
 140 145 150
 Phe Ile Cys Thr Ser Cys Asn Cys Asn Glu Pro Val Gly Val Thr
 155 160 165
 Asp Lys Phe Glu Asn Arg Lys His Ile Glu Phe Ser Phe Gln Pro
 170 175 180
 Val Cys Lys Ala Glu Met Ser Pro Ser Glu Val Ser Asp
 185 190

<210> 143
 <211> 961
 <212> DNA
 <213> Homo Sapien

<400> 143

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ctgttgccag tgtggggtga gacaagtttg tcccacaggg ctgtctgagc 150
agataagatt aagggctggg tctgtgtctca attaactcct gtgggcacgg 200
gggctgggaa gagcaaagtc agcgggtgcct acagtcagca ccatgctggg 250
cctgccgtgg aagggaggtc tgtcctgggc gctgctgctg cttctcttag 300
gctcccagat cctgctgata tatgcctggc atttccacga gcaaaggac 350
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tgctgtccac acattcaacc aacagagcaa ggactactat gcctacagac 450
tggggcacat cttgaattcc tggaaggagc aggtggagtc caagactgta 500
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cgacattgac aactgccatt tccaagaaag cacagagctg aacaatactt 600
tcacctgctt cttcaccatc agcaccaggc cctggatgac tcagttcagc 650
ctcctgaaca agacctgctt ggagggattc cactgagtga aaccactca 700
caggcttgtc catgtgctgc tcccacattc cgtggacatc agcactactc 750
tcctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgttatcct 800
atcttgcatg tgcttgagat ctcatgacag tgcttttagaa aatccacaca 850
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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950
aaaaaaaaa a 961

<210> 144
<211> 147
<212> PRT
<213> Homo Sapien

<400> 144
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Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His
20 25 30
Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg
35 40 45
Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln
50 55 60

Gln	Ser	Lys	Asp	Tyr	Tyr	Ala	Tyr	Arg	Leu	Gly	His	Ile	Leu	Asn	
				65					70					75	
Ser	Trp	Lys	Glu	Gln	Val	Glu	Ser	Lys	Thr	Val	Phe	Ser	Met	Glu	
				80					85					90	
Leu	Leu	Leu	Gly	Arg	Thr	Arg	Cys	Gly	Lys	Phe	Glu	Asp	Asp	Ile	
				95					100					105	
Asp	Asn	Cys	His	Phe	Gln	Glu	Ser	Thr	Glu	Leu	Asn	Asn	Thr	Phe	
				110					115					120	
Thr	Cys	Phe	Phe	Thr	Ile	Ser	Thr	Arg	Pro	Trp	Met	Thr	Gln	Phe	
				125					130					135	
Ser	Leu	Leu	Asn	Lys	Thr	Cys	Leu	Glu	Gly	Phe	His				
				140					145						

<210> 145
 <211> 1157
 <212> DNA
 <213> Homo Sapien

<400> 145
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<210> 146

<211> 176

<212> PRT

<213> Homo Sapien

<400> 146

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His	Arg	Ile	Lys	Trp	Asn	Arg	Lys	Ala	Leu	Pro	Ser	Thr	Ala	Gln	35	40	45	
Ile	Thr	Glu	Ala	Gln	Val	Ala	Glu	Asn	Arg	Pro	Gly	Ala	Phe	Ile	50	55	60	
Lys	Gln	Gly	Arg	Lys	Leu	Asp	Ile	Asp	Phe	Gly	Ala	Glu	Gly	Asn	65	70	75	
Arg	Tyr	Tyr	Glu	Ala	Asn	Tyr	Trp	Gln	Phe	Pro	Asp	Gly	Ile	His	80	85	90	
Tyr	Asn	Gly	Cys	Ser	Glu	Ala	Asn	Val	Thr	Lys	Glu	Ala	Phe	Val	95	100	105	
Thr	Gly	Cys	Ile	Asn	Ala	Thr	Gln	Ala	Ala	Asn	Gln	Gly	Glu	Phe	110	115	120	
Gln	Lys	Pro	Asp	Asn	Lys	Leu	His	Gln	Gln	Val	Leu	Trp	Arg	Leu	125	130	135	
Val	Gln	Glu	Leu	Cys	Ser	Leu	Lys	His	Cys	Glu	Phe	Trp	Leu	Glu	140	145	150	
Arg	Gly	Ala	Gly	Leu	Arg	Val	Thr	Met	His	Gln	Pro	Val	Leu	Leu	155	160	165	
Cys	Leu	Leu	Ala	Leu	Ile	Trp	Leu	Met	Val	Lys	170	175						

<210> 147
 <211> 333
 <212> DNA
 <213> Homo Sapien

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 ttcttatttt aattagtagc atctactcag agtcatgcaa gctggaaatc 200
 tttcattttg cttgtcagtg gggtaggtca ctgagtcctta gtttttattt 250
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 atgagtatat tgcattgatgc tgaggtttgg ggt 333

<210> 148
 <211> 73
 <212> PRT
 <213> Homo Sapien

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 Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
 35 40 45
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 50 55 60
 Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
 65 70

<210> 149
 <211> 1893
 <212> DNA
 <213> Homo Sapien

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<210> 150
 <211> 468
 <212> PRT
 <213> Homo Sapien

<400> 150
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 35 40 45
 Ile Ala Glu Ala Glu Glu Asp Lys Ile Lys Lys Thr Tyr Pro Pro
 50 55 60
 Glu Asn Lys Pro Gly Gln Ser Asn Tyr Ser Phe Val Asp Asn Leu
 65 70 75
 Asn Leu Leu Lys Ala Ile Thr Glu Lys Glu Lys Ile Glu Lys Glu
 80 85 90
 Arg Gln Ser Ile Arg Ser Ser Pro Leu Asp Asn Lys Leu Asn Val
 95 100 105
 Glu Asp Val Asp Ser Thr Lys Asn Arg Lys Leu Ile Asp Asp Tyr
 110 115 120
 Asp Ser Thr Lys Ser Gly Leu Asp His Lys Phe Gln Asp Asp Pro
 125 130 135
 Asp Gly Leu His Gln Leu Asp Gly Thr Pro Leu Thr Ala Glu Asp
 140 145 150
 Ile Val His Lys Ile Ala Ala Arg Ile Tyr Glu Glu Asn Asp Arg
 155 160 165
 Ala Val Phe Asp Lys Ile Val Ser Lys Leu Leu Asn Leu Gly Leu
 170 175 180
 Ile Thr Glu Ser Gln Ala His Thr Leu Glu Asp Glu Val Ala Glu
 185 190 195
 Val Leu Gln Lys Leu Ile Ser Lys Glu Ala Asn Asn Tyr Glu Glu
 200 205 210
 Asp Pro Asn Lys Pro Thr Ser Trp Thr Glu Asn Gln Ala Gly Lys

215										220					225				
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				230					235					240					
Ala	Lys	Gly	Glu	Asn	Asp	Glu	Thr	Val	Ser	Asn	Thr	Leu	Thr	Leu					
				245					250					255					
Thr	Asn	Gly	Leu	Glu	Arg	Arg	Thr	Lys	Thr	Tyr	Ser	Glu	Asp	Asn					
				260					265					270					
Phe	Glu	Glu	Leu	Gln	Tyr	Phe	Pro	Asn	Phe	Tyr	Ala	Leu	Leu	Lys					
				275					280					285					
Ser	Ile	Asp	Ser	Glu	Lys	Glu	Ala	Lys	Glu	Lys	Glu	Thr	Leu	Ile					
				290					295					300					
Thr	Ile	Met	Lys	Thr	Leu	Ile	Asp	Phe	Val	Lys	Met	Met	Val	Lys					
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Tyr	Gly	Thr	Ile	Ser	Pro	Glu	Glu	Gly	Val	Ser	Tyr	Leu	Glu	Asn					
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Leu	Asp	Glu	Met	Ile	Ala	Leu	Gln	Thr	Lys	Asn	Lys	Leu	Glu	Lys					
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Asn	Ala	Thr	Asp	Asn	Ile	Ser	Lys	Leu	Phe	Pro	Ala	Pro	Ser	Glu					
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Lys	Ser	His	Glu	Glu	Thr	Asp	Ser	Thr	Lys	Glu	Glu	Ala	Ala	Lys					
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Met	Glu	Lys	Glu	Tyr	Gly	Ser	Leu	Lys	Asp	Ser	Thr	Lys	Asp	Asp					
				380					385					390					
Asn	Ser	Asn	Pro	Gly	Gly	Lys	Thr	Asp	Glu	Pro	Lys	Gly	Lys	Thr					
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Glu	Ala	Tyr	Leu	Glu	Ala	Ile	Arg	Lys	Asn	Ile	Glu	Trp	Leu	Lys					
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Lys	His	Asp	Lys	Lys	Gly	Asn	Lys	Glu	Asp	Tyr	Asp	Leu	Ser	Lys					
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Met	Arg	Asp	Phe	Ile	Asn	Lys	Gln	Ala	Asp	Ala	Tyr	Val	Glu	Lys					
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Gly	Ile	Leu	Asp	Lys	Glu	Glu	Ala	Glu	Ala	Ile	Lys	Arg	Ile	Tyr					
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<210> 151
 <211> 2598
 <212> DNA
 <213> Homo Sapien

<400> 151

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<210> 152

<211> 155

<212> PRT

<213> Homo Sapien

<400> 152

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Leu	His	Ala	Gly	Lys	Val	Ile	Lys	Gly	Glu	Glu	Ile	Ser	Val	Val	
				35					40					45	
Pro	Asn	Arg	Trp	Leu	Asp	Ala	Ser	Leu	Ser	Pro	Val	Ile	Leu	Gly	
				50					55					60	
Val	Gln	Gly	Gly	Ser	Gln	Cys	Leu	Ser	Cys	Gly	Val	Gly	Gln	Glu	
				65					70					75	
Pro	Thr	Leu	Thr	Leu	Glu	Pro	Val	Asn	Ile	Met	Glu	Leu	Tyr	Leu	
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Gly	Ala	Lys	Glu	Ser	Lys	Ser	Phe	Thr	Phe	Tyr	Arg	Arg	Asp	Met	
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Gly	Leu	Thr	Ser	Ser	Phe	Glu	Ser	Ala	Ala	Tyr	Pro	Gly	Trp	Phe	
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Leu	Cys	Thr	Val	Pro	Glu	Ala	Asp	Gln	Pro	Val	Arg	Leu	Thr	Gln	
				125					130					135	
Leu	Pro	Glu	Asn	Gly	Gly	Trp	Asn	Ala	Pro	Ile	Thr	Asp	Phe	Tyr	
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Phe	Gln	Gln	Cys	Asp											
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<210> 153
 <211> 1152
 <212> DNA
 <213> Homo Sapien

<400> 153
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 cc 1152

<210> 154
 <211> 179
 <212> PRT
 <213> Homo Sapien

<400> 154
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 35 40 45
 Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala
 50 55 60
 Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile
 65 70 75
 Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr
 80 85 90
 Leu Met Lys Gln Val Leu Asn Phe Thr Leu Glu Glu Val Leu Phe
 95 100 105
 Pro Gln Ser Asp Arg Phe Gln Pro Tyr Met Gln Glu Val Val Pro
 110 115 120

Phe	Leu	Ala	Arg	Leu	Ser	Asn	Arg	Leu	Ser	Thr	Cys	His	Ile	Glu
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Gly	Asp	Asp	Leu	His	Ile	Gln	Arg	Asn	Val	Gln	Lys	Leu	Lys	Asp
				140					145					150
Thr	Val	Lys	Lys	Leu	Gly	Glu	Ser	Gly	Glu	Ile	Lys	Ala	Ile	Gly
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Glu	Leu	Asp	Leu	Leu	Phe	Met	Ser	Leu	Arg	Asn	Ala	Cys	Ile	
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<210> 155

<211> 1320

<212> DNA

<213> Homo Sapien

<400> 155

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 ctttatttaa aaatgaaaaa 1320

<210> 156

<211> 177

<212> PRT

<213> Homo Sapien

<400> 156

Met	Arg	Glu	Arg	Pro	Arg	Leu	Gly	Glu	Asp	Ser	Ser	Leu	Ile	Ser	1	5	10	15
Leu	Phe	Leu	Gln	Val	Val	Ala	Phe	Leu	Ala	Met	Val	Met	Gly	Thr	20	25	30	
His	Thr	Tyr	Ser	His	Trp	Pro	Ser	Cys	Cys	Pro	Ser	Lys	Gly	Gln	35	40	45	
Asp	Thr	Ser	Glu	Glu	Leu	Leu	Arg	Trp	Ser	Thr	Val	Pro	Val	Pro	50	55	60	
Pro	Leu	Glu	Pro	Ala	Arg	Pro	Asn	Arg	His	Pro	Glu	Ser	Cys	Arg	65	70	75	
Ala	Ser	Glu	Asp	Gly	Pro	Leu	Asn	Ser	Arg	Ala	Ile	Ser	Pro	Trp	80	85	90	
Arg	Tyr	Glu	Leu	Asp	Arg	Asp	Leu	Asn	Arg	Leu	Pro	Gln	Asp	Leu	95	100	105	
Tyr	His	Ala	Arg	Cys	Leu	Cys	Pro	His	Cys	Val	Ser	Leu	Gln	Thr	110	115	120	
Gly	Ser	His	Met	Asp	Pro	Arg	Gly	Asn	Ser	Glu	Leu	Leu	Tyr	His	125	130	135	
Asn	Gln	Thr	Val	Phe	Tyr	Arg	Arg	Pro	Cys	His	Gly	Glu	Lys	Gly	140	145	150	
Thr	His	Lys	Gly	Tyr	Cys	Leu	Glu	Arg	Arg	Leu	Tyr	Arg	Val	Ser	155	160	165	
Leu	Ala	Cys	Val	Cys	Val	Arg	Pro	Arg	Val	Met	Gly	170	175					

<210> 157
<211> 1515
<212> DNA
<213> Homo Sapien

<400> 157
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cagagtggat gctacaacat gatctaatacc ccggagactt gagggacctc 150
cgagtagaac ctgttacaac tagtggtgca acaggggact attcaatttt 200
gatgaatgta agctgggtac tccgggcaga tgccagcatc cgcttggtga 250
aggccaccaa gatttgtgtg acgggcaaaa gcaacttcca gtcctacagc 300
tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350
tggtggtaaa tggacatttt cctacatcgg cttccctgta gagctgaaca 400
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gatggccctt ccatgtctgt gaatttcacc tcaccaggct gcctagacca 500
cataatgaaa tataaaaaaa agtgtgtcaa ggccggaagc ctgtgggatac 550
cgaacatcac tgcttgtaag aagaatgagg agacagtaga agtgaacttc 600
acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650
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cagctgactc catattttcc tacttggtggc agcgactgca tccgacataa 800
aggaacagtt gtgctctgcc caaaaacagg cgtccctttc cctctggata 850
acaacaaaag caagccggga ggctggctgc ctctcctcct gctgtctctg 900
ctgggtggcca catgggtgct ggtggcaggg atctatctaa tgtggaggca 950
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ttaaggttct tgtggtttac ccatctgaaa tatgtttcca tcacacaatt 1050
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tgaaaagtgg cagaaaaaga aaatagcaga gatgggtcca gtgcagtggc 1150
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gacgtcaaca gtgtgtgcga tggtagctgt ggcaagagcg agggcagttc 1250
cagtgagaac tctcaagacc tcttccccct tgcctttaac cttttctgca 1300

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agagagattg atacaaaaga cgattacaat gctctcagtg tctgccccaa 1400
gtaccacctc atgaaggatg ccaactgcttt ctgtgcagaa cttctccatg 1450
tcaagcagca ggtgtcagca ggaaaaagat cacaagcctg ccacgatggc 1500
tgctgctcct tgtag 1515

<210> 158
<211> 502
<212> PRT
<213> Homo Sapien

<400> 158
Met Ser Leu Val Leu Leu Ser Leu Ala Ala Leu Cys Arg Ser Ala
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20 25 30
Ser Pro Glu Trp Met Leu Gln His Asp Leu Ile Pro Gly Asp Leu
35 40 45
Arg Asp Leu Arg Val Glu Pro Val Thr Thr Ser Val Ala Thr Gly
50 55 60
Asp Tyr Ser Ile Leu Met Asn Val Ser Trp Val Leu Arg Ala Asp
65 70 75
Ala Ser Ile Arg Leu Leu Lys Ala Thr Lys Ile Cys Val Thr Gly
80 85 90
Lys Ser Asn Phe Gln Ser Tyr Ser Cys Val Arg Cys Asn Tyr Thr
95 100 105
Glu Ala Phe Gln Thr Gln Thr Arg Pro Ser Gly Gly Lys Trp Thr
110 115 120
Phe Ser Tyr Ile Gly Phe Pro Val Glu Leu Asn Thr Val Tyr Phe
125 130 135
Ile Gly Ala His Asn Ile Pro Asn Ala Asn Met Asn Glu Asp Gly
140 145 150
Pro Ser Met Ser Val Asn Phe Thr Ser Pro Gly Cys Leu Asp His
155 160 165
Ile Met Lys Tyr Lys Lys Lys Cys Val Lys Ala Gly Ser Leu Trp
170 175 180
Asp Pro Asn Ile Thr Ala Cys Lys Lys Asn Glu Glu Thr Val Glu
185 190 195
Val Asn Phe Thr Thr Thr Pro Leu Gly Asn Arg Tyr Met Ala Leu

				200					205					210
Ile	Gln	His	Ser	Thr	Ile	Ile	Gly	Phe	Ser	Gln	Val	Phe	Glu	Pro
				215					220					225
His	Gln	Lys	Lys	Gln	Thr	Arg	Ala	Ser	Val	Val	Ile	Pro	Val	Thr
				230					235					240
Gly	Asp	Ser	Glu	Gly	Ala	Thr	Val	Gln	Leu	Thr	Pro	Tyr	Phe	Pro
				245					250					255
Thr	Cys	Gly	Ser	Asp	Cys	Ile	Arg	His	Lys	Gly	Thr	Val	Val	Leu
				260					265					270
Cys	Pro	Gln	Thr	Gly	Val	Pro	Phe	Pro	Leu	Asp	Asn	Asn	Lys	Ser
				275					280					285
Lys	Pro	Gly	Gly	Trp	Leu	Pro	Leu	Leu	Leu	Leu	Ser	Leu	Leu	Val
				290					295					300
Ala	Thr	Trp	Val	Leu	Val	Ala	Gly	Ile	Tyr	Leu	Met	Trp	Arg	His
				305					310					315
Glu	Arg	Ile	Lys	Lys	Thr	Ser	Phe	Ser	Thr	Thr	Thr	Leu	Leu	Pro
				320					325					330
Pro	Ile	Lys	Val	Leu	Val	Val	Tyr	Pro	Ser	Glu	Ile	Cys	Phe	His
				335					340					345
His	Thr	Ile	Cys	Tyr	Phe	Thr	Glu	Phe	Leu	Gln	Asn	His	Cys	Arg
				350					355					360
Ser	Glu	Val	Ile	Leu	Glu	Lys	Trp	Gln	Lys	Lys	Lys	Ile	Ala	Glu
				365					370					375
Met	Gly	Pro	Val	Gln	Trp	Leu	Ala	Thr	Gln	Lys	Lys	Ala	Ala	Asp
				380					385					390
Lys	Val	Val	Phe	Leu	Leu	Ser	Asn	Asp	Val	Asn	Ser	Val	Cys	Asp
				395					400					405
Gly	Thr	Cys	Gly	Lys	Ser	Glu	Gly	Ser	Pro	Ser	Glu	Asn	Ser	Gln
				410					415					420
Asp	Leu	Phe	Pro	Leu	Ala	Phe	Asn	Leu	Phe	Cys	Ser	Asp	Leu	Arg
				425					430					435
Ser	Gln	Ile	His	Leu	His	Lys	Tyr	Val	Val	Val	Tyr	Phe	Arg	Glu
				440					445					450
Ile	Asp	Thr	Lys	Asp	Asp	Tyr	Asn	Ala	Leu	Ser	Val	Cys	Pro	Lys
				455					460					465
Tyr	His	Leu	Met	Lys	Asp	Ala	Thr	Ala	Phe	Cys	Ala	Glu	Leu	Leu
				470					475					480
His	Val	Lys	Gln	Gln	Val	Ser	Ala	Gly	Lys	Arg	Ser	Gln	Ala	Cys

485

490

495

His Asp Gly Cys Cys Ser Leu
500

<210> 159

<211> 535

<212> DNA

<213> Homo Sapien

<400> 159

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agttgcccg cctgtgccagg aggtagtatg aagcttgaca ttggcatcat 200

caatgaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250

cctccccctg gaattacact gtcacttggg accccaaccg gtaccctctg 300

gaagttgtac aggccagtg taggaacttg ggctgcatca atgctcaagg 350

aaaggaagac atctccatga attccgttcc catccagcaa gagaccctgg 400

tcgtccggag gaagcaccaa ggctgctctg tttctttcca gttggagaag 450

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gcagtaagag gtgcatatcc actcagctga agaag 535

<210> 160

<211> 163

<212> PRT

<213> Homo Sapien

<400> 160

Met	Thr	Val	Lys	Thr	Leu	His	Gly	Pro	Ala	Met	Val	Lys	Tyr	Leu
1				5					10					15

Leu	Leu	Ser	Ile	Leu	Gly	Leu	Ala	Phe	Leu	Ser	Glu	Ala	Ala	Ala
				20					25					30

Arg	Lys	Ile	Pro	Lys	Val	Gly	His	Thr	Phe	Phe	Gln	Lys	Pro	Glu
				35					40					45

Ser	Cys	Pro	Pro	Val	Pro	Gly	Gly	Ser	Met	Lys	Leu	Asp	Ile	Gly
				50					55					60

Ile	Ile	Asn	Glu	Asn	Gln	Arg	Val	Ser	Met	Ser	Arg	Asn	Ile	Glu
				65					70					75

Ser	Arg	Ser	Thr	Ser	Pro	Trp	Asn	Tyr	Thr	Val	Thr	Trp	Asp	Pro
				80					85					90

Asn	Arg	Tyr	Pro	Ser	Glu	Val	Val	Gln	Ala	Gln	Cys	Arg	Asn	Leu
				95					100					105
Gly	Cys	Ile	Asn	Ala	Gln	Gly	Lys	Glu	Asp	Ile	Ser	Met	Asn	Ser
				110					115					120
Val	Pro	Ile	Gln	Gln	Glu	Thr	Leu	Val	Val	Arg	Arg	Lys	His	Gln
				125					130					135
Gly	Cys	Ser	Val	Ser	Phe	Gln	Leu	Glu	Lys	Val	Leu	Val	Thr	Val
				140					145					150
Gly	Cys	Thr	Cys	Val	Thr	Pro	Val	Ile	His	His	Val	Gln		
				155					160					

<210> 161

<211> 2380

<212> DNA

<213> Homo Sapien

<400> 161

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cacgggctga ctgggggtgc tgccccctt gggggggggc agcacagggc 200
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ataaaggcag acgctgtttt tctaaaaaaa 2380

<210> 162

<211> 705

<212> PRT

<213> Homo Sapien

<400> 162

Met	Pro	Val	Pro	Trp	Phe	Leu	Leu	Ser	Leu	Ala	Leu	Gly	Arg	Ser
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Pro	Val	Val	Leu	Ser	Leu	Glu	Arg	Leu	Val	Gly	Pro	Gln	Asp	Ala
				20					25					30

Thr	His	Cys	Ser	Pro	Gly	Leu	Ser	Cys	Arg	Leu	Trp	Asp	Ser	Asp
				35					40					45

Ile	Leu	Cys	Leu	Pro	Gly	Asp	Ile	Val	Pro	Ala	Pro	Gly	Pro	Val
				50					55					60

Leu	Ala	Pro	Thr	His	Leu	Gln	Thr	Glu	Leu	Val	Leu	Arg	Cys	Gln
				65					70					75

Lys	Glu	Thr	Asp	Cys	Asp	Leu	Cys	Leu	Arg	Val	Ala	Val	His	Leu
				80					85					90

Ala	Val	His	Gly	His	Trp	Glu	Glu	Pro	Glu	Asp	Glu	Glu	Lys	Phe
				95					100					105

Gly	Gly	Ala	Ala	Asp	Ser	Gly	Val	Glu	Glu	Pro	Arg	Asn	Ala	Ser
				110					115					120

Leu	Gln	Ala	Gln	Val	Val	Leu	Ser	Phe	Gln	Ala	Tyr	Pro	Thr	Ala
				125					130					135

Arg	Cys	Val	Leu	Leu	Glu	Val	Gln	Val	Pro	Ala	Ala	Leu	Val	Gln
				140					145					150

Phe	Gly	Gln	Ser	Val	Gly	Ser	Val	Val	Tyr	Asp	Cys	Phe	Glu	Ala
				155					160					165

Ala	Leu	Gly	Ser	Glu	Val	Arg	Ile	Trp	Ser	Tyr	Thr	Gln	Pro	Arg
				170					175					180

Tyr	Glu	Lys	Glu	Leu	Asn	His	Thr	Gln	Gln	Leu	Pro	Ala	Leu	Pro
				185					190					195

Trp	Leu	Asn	Val	Ser	Ala	Asp	Gly	Asp	Asn	Val	His	Leu	Val	Leu
				200					205					210

Asn	Val	Ser	Glu	Glu	Gln	His	Phe	Gly	Leu	Ser	Leu	Tyr	Trp	Asn
				215					220					225

Gln	Val	Gln	Gly	Pro	Pro	Lys	Pro	Arg	Trp	His	Lys	Asn	Leu	Thr
				230					235					240

Gly	Pro	Gln	Ile	Ile	Thr	Leu	Asn	His	Thr	Asp	Leu	Val	Pro	Cys
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				245					250					255
Leu	Cys	Ile	Gln	Val	Trp	Pro	Leu	Glu	Pro	Asp	Ser	Val	Arg	Thr
				260					265					270
Asn	Ile	Cys	Pro	Phe	Arg	Glu	Asp	Pro	Arg	Ala	His	Gln	Asn	Leu
				275					280					285
Trp	Gln	Ala	Ala	Arg	Leu	Arg	Leu	Leu	Thr	Leu	Gln	Ser	Trp	Leu
				290					295					300
Leu	Asp	Ala	Pro	Cys	Ser	Leu	Pro	Ala	Glu	Ala	Ala	Leu	Cys	Trp
				305					310					315
Arg	Ala	Pro	Gly	Gly	Asp	Pro	Cys	Gln	Pro	Leu	Val	Pro	Pro	Leu
				320					325					330
Ser	Trp	Glu	Asn	Val	Thr	Val	Asp	Lys	Val	Leu	Glu	Phe	Pro	Leu
				335					340					345
Leu	Lys	Gly	His	Pro	Asn	Leu	Cys	Val	Gln	Val	Asn	Ser	Ser	Glu
				350					355					360
Lys	Leu	Gln	Leu	Gln	Glu	Cys	Leu	Trp	Ala	Asp	Ser	Leu	Gly	Pro
				365					370					375
Leu	Lys	Asp	Asp	Val	Leu	Leu	Leu	Glu	Thr	Arg	Gly	Pro	Gln	Asp
				380					385					390
Asn	Arg	Ser	Leu	Cys	Ala	Leu	Glu	Pro	Ser	Gly	Cys	Thr	Ser	Leu
				395					400					405
Pro	Ser	Lys	Ala	Ser	Thr	Arg	Ala	Ala	Arg	Leu	Gly	Glu	Tyr	Leu
				410					415					420
Leu	Gln	Asp	Leu	Gln	Ser	Gly	Gln	Cys	Leu	Gln	Leu	Trp	Asp	Asp
				425					430					435
Asp	Leu	Gly	Ala	Leu	Trp	Ala	Cys	Pro	Met	Asp	Lys	Tyr	Ile	His
				440					445					450
Lys	Arg	Trp	Ala	Leu	Val	Trp	Leu	Ala	Cys	Leu	Leu	Phe	Ala	Ala
				455					460					465
Ala	Leu	Ser	Leu	Ile	Leu	Leu	Leu	Lys	Lys	Asp	His	Ala	Lys	Gly
				470					475					480
Trp	Leu	Arg	Leu	Leu	Lys	Gln	Asp	Val	Arg	Ser	Gly	Ala	Ala	Ala
				485					490					495
Arg	Gly	Arg	Ala	Ala	Leu	Leu	Leu	Tyr	Ser	Ala	Asp	Asp	Ser	Gly
				500					505					510
Phe	Glu	Arg	Leu	Val	Gly	Ala	Leu	Ala	Ser	Ala	Leu	Cys	Gln	Leu
				515					520					525
Pro	Leu	Arg	Val	Ala	Val	Asp	Leu	Trp	Ser	Arg	Arg	Glu	Leu	Ser

530	535	540
Ala Gln Gly Pro Val Ala Trp Phe His	Ala Gln Arg Arg Gln Thr	
545	550	555
Leu Gln Glu Gly Gly Val Val Val Leu	Leu Phe Ser Pro Gly Ala	
560	565	570
Val Ala Leu Cys Ser Glu Trp Leu Gln	Asp Gly Val Ser Gly Pro	
575	580	585
Gly Ala His Gly Pro His Asp Ala Phe	Arg Ala Ser Leu Ser Cys	
590	595	600
Val Leu Pro Asp Phe Leu Gln Gly Arg	Ala Pro Gly Ser Tyr Val	
605	610	615
Gly Ala Cys Phe Asp Arg Leu Leu His	Pro Asp Ala Val Pro Ala	
620	625	630
Leu Phe Arg Thr Val Pro Val Phe Thr	Leu Pro Ser Gln Leu Pro	
635	640	645
Asp Phe Leu Gly Ala Leu Gln Gln Pro	Arg Ala Pro Arg Ser Gly	
650	655	660
Arg Leu Gln Glu Arg Ala Glu Gln Val	Ser Arg Ala Leu Gln Pro	
665	670	675
Ala Leu Asp Ser Tyr Phe His Pro Pro	Gly Thr Pro Ala Pro Gly	
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Arg Gly Val Gly Pro Gly Ala Gly Pro	Gly Ala Gly Asp Gly Thr	
695	700	705

<210> 163
 <211> 2478
 <212> DNA
 <213> Homo Sapien

<400> 163
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ccggagcctt cctgtttctcc atgggcttcc tcgtcgcagt actctgctac 450
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 agaaagagcc accagctgga agctgcatgt taggtggcct ttctctgcag 1050
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 ccagccccctg gggatttgca cagacagaac atctgacca aatgtgctac 1150
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 aaacggtagc tatttaaaaa aaaaaaaa 2478

<210> 164

<211> 574

<212> PRT

<213> Homo Sapien

<400> 164

Met	Arg	Thr	Leu	Leu	Thr	Ile	Leu	Thr	Val	Gly	Ser	Leu	Ala	Ala
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His	Ala	Pro	Glu	Asp	Pro	Ser	Asp	Leu	Leu	Gln	His	Val	Lys	Phe
				20					25					30
Gln	Ser	Ser	Asn	Phe	Glu	Asn	Ile	Leu	Thr	Trp	Asp	Ser	Gly	Pro
				35					40					45
Glu	Gly	Thr	Pro	Asp	Thr	Val	Tyr	Ser	Ile	Glu	Tyr	Lys	Thr	Tyr
				50					55					60
Gly	Glu	Arg	Asp	Trp	Val	Ala	Lys	Lys	Gly	Cys	Gln	Arg	Ile	Thr
				65					70					75
Arg	Lys	Ser	Cys	Asn	Leu	Thr	Val	Glu	Thr	Gly	Asn	Leu	Thr	Glu
				80					85					90
Leu	Tyr	Tyr	Ala	Arg	Val	Thr	Ala	Val	Ser	Ala	Gly	Gly	Arg	Ser
				95					100					105
Ala	Thr	Lys	Met	Thr	Asp	Arg	Phe	Ser	Ser	Leu	Gln	His	Thr	Thr
				110					115					120
Leu	Lys	Pro	Pro	Asp	Val	Thr	Cys	Ile	Ser	Lys	Val	Arg	Ser	Ile

				125					130					135
Gln	Met	Ile	Val	His	Pro	Thr	Pro	Thr	Pro	Ile	Arg	Ala	Gly	Asp
				140					145					150
Gly	His	Arg	Leu	Thr	Leu	Glu	Asp	Ile	Phe	His	Asp	Leu	Phe	Tyr
				155					160					165
His	Leu	Glu	Leu	Gln	Val	Asn	Arg	Thr	Tyr	Gln	Met	His	Leu	Gly
				170					175					180
Gly	Lys	Gln	Arg	Glu	Tyr	Glu	Phe	Phe	Gly	Leu	Thr	Pro	Asp	Thr
				185					190					195
Glu	Phe	Leu	Gly	Thr	Ile	Met	Ile	Cys	Val	Pro	Thr	Trp	Ala	Lys
				200					205					210
Glu	Ser	Ala	Pro	Tyr	Met	Cys	Arg	Val	Lys	Thr	Leu	Pro	Asp	Arg
				215					220					225
Thr	Trp	Thr	Tyr	Ser	Phe	Ser	Gly	Ala	Phe	Leu	Phe	Ser	Met	Gly
				230					235					240
Phe	Leu	Val	Ala	Val	Leu	Cys	Tyr	Leu	Ser	Tyr	Arg	Tyr	Val	Thr
				245					250					255
Lys	Pro	Pro	Ala	Pro	Pro	Asn	Ser	Leu	Asn	Val	Gln	Arg	Val	Leu
				260					265					270
Thr	Phe	Gln	Pro	Leu	Arg	Phe	Ile	Gln	Glu	His	Val	Leu	Ile	Pro
				275					280					285
Val	Phe	Asp	Leu	Ser	Gly	Pro	Ser	Ser	Leu	Ala	Gln	Pro	Val	Gln
				290					295					300
Tyr	Ser	Gln	Ile	Arg	Val	Ser	Gly	Pro	Arg	Glu	Pro	Ala	Gly	Ala
				305					310					315
Pro	Gln	Arg	His	Ser	Leu	Ser	Glu	Ile	Thr	Tyr	Leu	Gly	Gln	Pro
				320					325					330
Asp	Ile	Ser	Ile	Leu	Gln	Pro	Ser	Asn	Val	Pro	Pro	Pro	Gln	Ile
				335					340					345
Leu	Ser	Pro	Leu	Ser	Tyr	Ala	Pro	Asn	Ala	Ala	Pro	Glu	Val	Gly
				350					355					360
Pro	Pro	Ser	Tyr	Ala	Pro	Gln	Val	Thr	Pro	Glu	Ala	Gln	Phe	Pro
				365					370					375
Phe	Tyr	Ala	Pro	Gln	Ala	Ile	Ser	Lys	Val	Gln	Pro	Ser	Ser	Tyr
				380					385					390
Ala	Pro	Gln	Ala	Thr	Pro	Asp	Ser	Trp	Pro	Pro	Ser	Tyr	Gly	Val
				395					400					405
Cys	Met	Glu	Gly	Ser	Gly	Lys	Asp	Ser	Pro	Thr	Gly	Thr	Leu	Ser

	410		415		420
Ser Pro Lys His	Leu Arg Pro Lys Gly	Gln Leu Gln Lys Glu	Pro		
	425		430		435
Pro Ala Gly Ser	Cys Met Leu Gly Gly	Leu Ser Leu Gln Glu	Val		
	440		445		450
Thr Ser Leu Ala	Met Glu Glu Ser Gln	Glu Ala Lys Ser Leu	His		
	455		460		465
Gln Pro Leu Gly	Ile Cys Thr Asp Arg	Thr Ser Asp Pro Asn	Val		
	470		475		480
Leu His Ser Gly	Glu Glu Gly Thr Pro	Gln Tyr Leu Lys Gly	Gln		
	485		490		495
Leu Pro Leu Leu	Ser Ser Val Gln Ile	Glu Gly His Pro Met	Ser		
	500		505		510
Leu Pro Leu Gln	Pro Pro Ser Gly Pro	Cys Ser Pro Ser Asp	Gln		
	515		520		525
Gly Pro Ser Pro	Trp Gly Leu Leu Glu	Ser Leu Val Cys Pro	Lys		
	530		535		540
Asp Glu Ala Lys	Ser Pro Ala Pro Glu	Thr Ser Asp Leu Glu	Gln		
	545		550		555
Pro Thr Glu Leu	Asp Ser Leu Phe Arg	Gly Leu Ala Leu Thr	Val		
	560		565		570
Gln Trp Glu Ser					

<210> 165
 <211> 1060
 <212> DNA
 <213> Homo Sapien

<400> 165
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 ctggggggcgc tctggtgggt cccggggccag tcggatctca gccacggacg 150
 gcgttttctcg gacctcaaag tgtgcgggga cgaagagtgc agcatgttaa 200
 tgtaccgtgg gaaagctctt gaagacttca cgggccctga ttgtcgtttt 250
 gtgaatttta aaaaagggtga cgatgtatat gtctactaca aactggcagg 300
 gggatccctt gaactttggg ctggaagtgt tgaacacagt tttggatatt 350
 ttccaaaaga tttgatcaag gtacttcata aatacacgga agaagagcta 400

catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450
tgattttaat agttataatg tagaagagct tttaggatct ttggaactgg 500
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cctcacacca gcggtcctgc ggctaacgct cagggagtgc agtcttcgtt 750
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aaagcagaac tggcaatagt tctcctgcct cgggtggagcg ggagaagaca 850
gatgcttaca aagtctgaa aacagaaatg agtcagagag gaagtggaca 900
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aaaaaaaaaa 1060

<210> 166
<211> 303
<212> PRT
<213> Homo Sapien

<400> 166
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Ala Leu Trp Trp Val Pro Gly Gln Ser Asp Leu Ser His Gly Arg
20 25 30
Arg Phe Ser Asp Leu Lys Val Cys Gly Asp Glu Glu Cys Ser Met
35 40 45
Leu Met Tyr Arg Gly Lys Ala Leu Glu Asp Phe Thr Gly Pro Asp
50 55 60
Cys Arg Phe Val Asn Phe Lys Lys Gly Asp Asp Val Tyr Val Tyr
65 70 75
Tyr Lys Leu Ala Gly Gly Ser Leu Glu Leu Trp Ala Gly Ser Val
80 85 90
Glu His Ser Phe Gly Tyr Phe Pro Lys Asp Leu Ile Lys Val Leu
95 100 105
His Lys Tyr Thr Glu Glu Glu Leu His Ile Pro Ala Asp Glu Thr
110 115 120

Asp	Phe	Val	Cys	Phe	Glu	Gly	Gly	Arg	Asp	Asp	Phe	Asn	Ser	Tyr	125	130	135
Asn	Val	Glu	Glu	Leu	Leu	Gly	Ser	Leu	Glu	Leu	Glu	Asp	Ser	Val	140	145	150
Pro	Glu	Glu	Ser	Lys	Lys	Ala	Glu	Glu	Val	Ser	Gln	His	Arg	Glu	155	160	165
Lys	Ser	Pro	Glu	Glu	Ser	Arg	Gly	Arg	Glu	Leu	Asp	Pro	Val	Pro	170	175	180
Glu	Pro	Glu	Ala	Phe	Arg	Ala	Asp	Ser	Glu	Asp	Gly	Glu	Gly	Ala	185	190	195
Phe	Ser	Glu	Ser	Thr	Glu	Gly	Leu	Gln	Gly	Gln	Pro	Ser	Ala	Gln	200	205	210
Glu	Ser	His	Pro	His	Thr	Ser	Gly	Pro	Ala	Ala	Asn	Ala	Gln	Gly	215	220	225
Val	Gln	Ser	Ser	Leu	Asp	Thr	Phe	Glu	Glu	Ile	Leu	His	Asp	Lys	230	235	240
Leu	Lys	Val	Pro	Gly	Ser	Glu	Ser	Arg	Thr	Gly	Asn	Ser	Ser	Pro	245	250	255
Ala	Ser	Val	Glu	Arg	Glu	Lys	Thr	Asp	Ala	Tyr	Lys	Val	Leu	Lys	260	265	270
Thr	Glu	Met	Ser	Gln	Arg	Gly	Ser	Gly	Gln	Cys	Val	Ile	His	Tyr	275	280	285
Ser	Lys	Gly	Phe	Arg	Trp	His	Gln	Asn	Leu	Ser	Leu	Phe	Tyr	Lys	290	295	300

Asp Cys Phe

<210> 167

<211> 2570

<212> DNA

<213> Homo Sapien

<400> 167

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tcgaagtctt gaactccagc cccgcacatc cacgcgcggc acaggcgcgg 200

caggcggcag gtcccgggcg aaggcgatgc gcgcaggggg tcgggcagct 250

gggctcgggc ggcggggagta gggcccggca gggaggcagg gaggctgcat 300

attcagagtc gcgggctgcg ccctgggcag aggccgcctt cgctccacgc 350
 aacacctgct gctgccaccg cgccgcgatg agccgcgtgg tctcgctgct 400
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<210> 168

<211> 273

<212> PRT

<213> Homo Sapien

<400> 168

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Gly	His	Gly	Ala	Phe	Cys	Arg	Arg	Val	Val	Ser	Gly	Gln	Lys	Val
				20					25					30
Cys	Phe	Ala	Asp	Phe	Lys	His	Pro	Cys	Tyr	Lys	Met	Ala	Tyr	Phe
				35					40					45
His	Glu	Leu	Ser	Ser	Arg	Val	Ser	Phe	Gln	Glu	Ala	Arg	Leu	Ala
				50					55					60
Cys	Glu	Ser	Glu	Gly	Gly	Val	Leu	Leu	Ser	Leu	Glu	Asn	Glu	Ala
				65					70					75
Glu	Gln	Lys	Leu	Ile	Glu	Ser	Met	Leu	Gln	Asn	Leu	Thr	Lys	Pro
				80					85					90

Gly	Thr	Gly	Ile	Ser	Asp	Gly	Asp	Phe	Trp	Ile	Gly	Leu	Trp	Arg	
				95					100					105	
Asn	Gly	Asp	Gly	Gln	Thr	Ser	Gly	Ala	Cys	Pro	Asp	Leu	Tyr	Gln	
				110					115					120	
Trp	Ser	Asp	Gly	Ser	Asn	Ser	Gln	Tyr	Arg	Asn	Trp	Tyr	Thr	Asp	
				125					130					135	
Glu	Pro	Ser	Cys	Gly	Ser	Glu	Lys	Cys	Val	Val	Met	Tyr	His	Gln	
				140					145					150	
Pro	Thr	Ala	Asn	Pro	Gly	Leu	Gly	Gly	Pro	Tyr	Leu	Tyr	Gln	Trp	
				155					160					165	
Asn	Asp	Asp	Arg	Cys	Asn	Met	Lys	His	Asn	Tyr	Ile	Cys	Lys	Tyr	
				170					175					180	
Glu	Pro	Glu	Ile	Asn	Pro	Thr	Ala	Pro	Val	Glu	Lys	Pro	Tyr	Leu	
				185					190					195	
Thr	Asn	Gln	Pro	Gly	Asp	Thr	His	Gln	Asn	Val	Val	Val	Thr	Glu	
				200					205					210	
Ala	Gly	Ile	Ile	Pro	Asn	Leu	Ile	Tyr	Val	Val	Ile	Pro	Thr	Ile	
				215					220					225	
Pro	Leu	Leu	Leu	Leu	Ile	Leu	Val	Ala	Phe	Gly	Thr	Cys	Cys	Phe	
				230					235					240	
Gln	Met	Leu	His	Lys	Ser	Lys	Gly	Arg	Thr	Lys	Thr	Ser	Pro	Asn	
				245					250					255	
Gln	Ser	Thr	Leu	Trp	Ile	Ser	Lys	Ser	Thr	Arg	Lys	Glu	Ser	Gly	
				260					265					270	

Met Glu Val

<210> 169

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 169

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<210> 170

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 170

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